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## 1993 - 1995 University Catalog

Available from: Titan Shops Bookstore on the University campus or by mail order to:

Titan Shops CSU Fullerton 2875 Orange/Olive Road Orange, CA 92665

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## University Address

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# California State University, Fullerton



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American Assembly of Collegiate Schools of Business American Chemical Society

American Speech-Language-Hearing Association

Commission on Teacher Credentialing

Computer Sciences Accreditation Commission

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National Association of Schools of Art and Design

National Association of Schools of Dance

National Association of Schools of Music

National Association of Schools of Public Affairs and

Administration

National Association of Schools of Theatre

National Athletic Trainers Association

National Council for Accreditation of Teacher Education

National League for Nursing

Southern California Consortium on International Studies

Universities Field Staff International

Western Association of Graduate Schools

Western Association of Schools and Colleges

This Catalog

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## Nondiscrimination Policy

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Office of Civil Rights
Regional Director, Region IX
Old Federal Building
50 United Nations Plaza, Room 239
San Francisco, CA 94102
(415) 556-7000

## This Catalog

Within this catalog may be found general academic and administrative information as well as specific descriptions of the departments, their majors and the courses offered in each. The first major part contains orienting information such as the calendar, materials on the California State University, an overview of Cal State Fullerton and facts about student services and activities on the campus.

The subsequent sections of the catalog are concerned with: admission, registration, records and regulations; academic advisement; and university courses. The next sections describe the departments and the programs of study and courses they offer. The final part of the catalog contains a listing of the faculty and administration. An index may be found at the end to help the reader locate specific items.

Because this catalog must be prepared well ahead of the academic years it covers, changes in some programs and rules occur. The class schedule and subsequent errata sheets are the final authority in regard to classes offered, instructors and revisions of regulations. This publication may be bought from the Titan Bookstore.

### Credits

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## President's Message

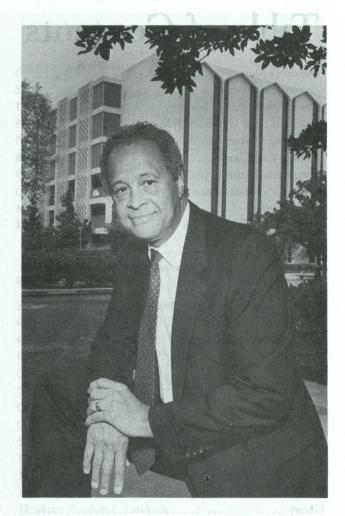
Welcome to California State University, Fullerton. The university is here to prepare students to meet the challenges of their future chosen careers. Our undergraduate and postbaccalaureate programs are designed to help students reach their optimum personal and professional development. We are a caring campus that provides an environment whereby our students have opportunities for learning, growth, service to society, and involvement in the university community. Through our programs, students will learn to be concerned with the pursuit of excellence and the importance of quality of life issues.

California State University, Fullerton has awarded more than 100,000 degrees since classes began in 1959, and we have played an integral role in the lives of students, almuni and the community at large. Our university provides the Orange County community, its surrounding regions, the state and the nation with the trained professionals in business, computer science, engineering, health, science and teaching, the arts and other service sectors with growing numbers of well-educated personnel. By providing access to professional careers for the broadest cross-section of Americans, including women and members of minority and immigrant groups, our university represents a pathway into the American mainstream for individuals and families who otherwise would not have the opportunity to make this step, thus helping to ensure the stability of our free economy and our democratic government.

As Orange County has grown and matured, so has the university. Enrollment now stands at approximately 25,000 students, and the faculty is made up of over 700 distinguished professionals, who are dedicated to excellence in teaching, scholarly and creative activity, and service to the university and the community. Our faculty members are actively involved in giving each student the finest academic experience possible.

We are proud that in the university's relatively short history our curriculum has grown to include 47 undergraduate majors and 44 graduate degrees, plus a variety of credential and certificate programs.

The university tradition extends from our quality academic offerings, our cultural diversity, our extensive outreach programs to the personal, first-hand interaction with professors whose diversity and backgrounds provide unsurpassed enrichment for a total university education. We support and encourage risk-taking, striving for excellence and the full development of human potential. Our students can participate in or be spectators of intellectual, cultural and athletics programs and events. By the time students graduate, they will have received one of the finest educations possible. They will be prepared for continued personal and



professional development throughout their lives; they will be ambassadors of goodwill for the university and our surrounding communities will benefit from their contributions to society.

California State University, Fullerton fosters a stimulating and challenging environment where learning is preeminent. The campus community is dedicated to the development of humane leaders prepared to meet the opportunities and challenges of a changing, diverse world. As you become familiar with and involved in the campus and its activities, you will discover exciting opportunities to grow and contribute. I invite you to participate fully.

Milton A. Gordon

President

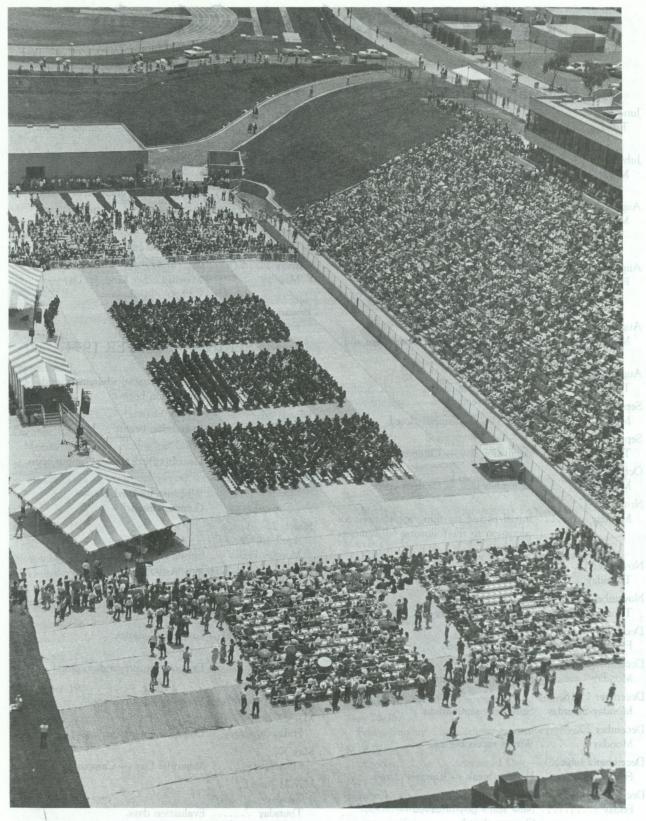
California State University, Fullerton

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Semester ends; grade reports due

## 1993-94 Academic Calendar

Please note: This academic calendar is not intended to be construed as an employee work calendar.

SUMN	MER SESSION 1993		1994
June 1		January 1,	
luesday	Instruction begins; registration and classes.		New Year's Day — Campus closed.
July 5,		January 3, Monday	Winter recess ends.
	Independence Day observed —	January 3,	
4	Campus closed.	Monday	Semester ends; grade reports due.
August 2, Monday	Initial period for filing applications for	INTI	ERSESSION - 1994
	admission to the following spring semes-	January 3,	
	ter begins.		Intersession begins.
August 20, Friday	Instruction ends.	January 17, Monday	Martin Luther King, Jr. Day —
			Campus closed.
	SEMESTER 1993	January 28,	
August 23,	Academic year begins; advisement and	Friday	
Monday	orientation begins.	SPRIN	IG SEMESTER 1994
August 26,		January 26,	S . 1 . 1.
Thursday September 6,	Instruction begins.	Wednesday	Semester begins; advisement and orientation begins.
	Labor Day — Campus closed.	January 31,	
September 9,			Instruction begins.
	Admission day — Campus open.	February 12, Saturday	Lincoln's Birthday — Campus open.
October 11,	Columbus Day — Campus open.	February 21,	
November 1,	Columbus Day — Campus open.	Monday	Washington's Birthday —
	Initial period for filing applications for	March 28-	Campus closed.
	admission to the following fall semester	April 1,	
November 11,	begins.		Spring recess — Campus open
	Veterans Day — Campus open.	A .1	but no classes.
November 25-26,		April 4, Monday	Instruction resumes.
	Thanksgiving recess — Campus closed.	May 20,	moraction resumes.
December 10,		Friday	Last day of classes.
Friday December 13,	Last day of classes.	May 23,	
	Examination preparation day.		Examination preparation day.
December 13-18,		May 23-28, Monday-Saturday	Semester examinations.
Monday-Saturday	Semester examinations.	May 27-29,	cemester examinations.
December 20,	W/:		Commencement exercises.
	Winter recess begins.	May 30,	
December 24-30, Friday-Thursday .	Holiday break — Campus closed.		Memorial Day — Campus closed.
December 31,		May 31-June 2, Tuesday-	
	New Year's Day observed —	Thursday	Evaluation days.
	Campus closed.	June 2,	
		Thursday	Semester ends; grade reports due.

## 1994-95 Academic Calendar

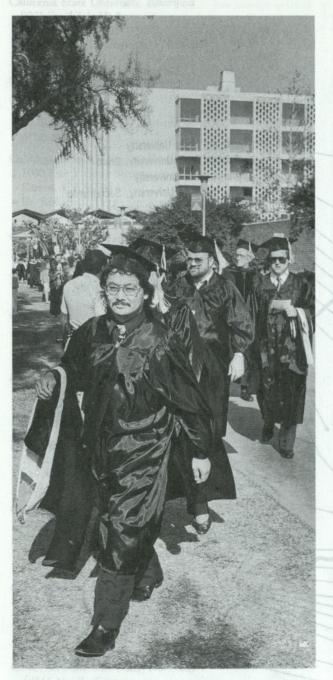
SUMMER	SESSION 1994		1995 leges were brought toget
May 31,		anuary	on those Higher Education Act of 1960.
	action begins; registration and	Sunday	New Year's Day — Campus closed.
classe		January 2,	
July 4,		Monday	New Year's Day observed —
	pendence Day — Campus closed.		Campus closed.
August 1,	<b>工程的</b> 是一种图像一种 经		
	l period for filing applications for	Tuesday	Winter recess ends.
	ssion to the following spring semes-	January 3,	
ter be	egins.	Tuesday	Semester ends; grade reports due.
August 19,		INTE	ERSESSION - 1995
Friday Instru	action ends.		sisting of ex officio members, alumni
FALL SEN	MESTER 1994	juitually 5,	Intersession begins.
August 22,			the chancellon who is the chief execut
	emic year begins; advisement and	Monday	Martin Luther King Ir Day —
	tation begins.	tive officers of the res	Martin Luther King, Jr. Day — Campus closed.
August 25,			
Thursday Instru	action begins.	Friday	Intersession ends.
September 5,			
Monday Labor	Day — Campus closed.		IG SEMESTER 1995
September 9,		January 25,	of the faculty from each carrows, teer
	ission Day — Campus open.	Wednesday	Semester begins; advisement and orientation begins.
October 10,		- chancellor	offentation begins.
	mbus Day — Campus open.	January 30,	Instruction begins.
November 1,			distinguished (senity, whose printery
	l period for filing applications for		Lincoln's Birthday — Campus open.
	ssion to the following Fall Semester		ie geographic and curroular character,
begin	s.		Washington's Birthday —
November 11,			Campus closed.
Friday Veter	ans Day — Campus open.		ducation. All of the campuses require
November 24-25		the second set of a firm of a first firm of the second second second second second second second second second	Spring recess — Campus open
Thursday-Friday . Than	ksgiving recess — Campus closed.	regardless of the type of	but no classes.
December 9,		April 3,	
Friday Last of	day of classes.	Monday	Instruction resumes.
December 12,		May 19,	
Monday Exam	nination preparation day.		Last day of classes.
December 12-17,		May 22,	
Monday-Saturday Seme	ester examinations.	Monday	Examination preparation day.
December 19,		May 22-27,	
Monday Wint	er recess begins.		Semester examinations.
December 26-30,		May 26-28,	
Monday-Friday Holic	day break — Campus closed.	Friday-Sunday	Commencement exercises.
		May 29,	7,000 ruct ly_Last year the system aware
		Monday	Memorial Day — Campus closed.
		May 30-	
		June 1, Tuesday-Thursday	Evaluation days
			Evaluation days.
		June 1,	Samastar ands: grade reports due

Thursday ...... Semester ends; grade reports due.

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1995 - 1995 - 1995 - 1995	August 19,
	FALL SEMESTER 1994
	Monday Academic system is a secure and contents and contents begins
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	September 9, 100 miles in the contract of the
	November 11.
	Friday Vaterina Day Chingles open
	Thursday raiday . Thanking bear - C. nopus closed
	Menday Sarurday Semester Managaras
May 22-27,	
M. v 26-28	

## The California State University



The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act of 1960. In 1972 the system became The California State University and Colleges and in 1982 the system became The California State University. Today, all 20 campuses have the title "university."

The oldest campus — San Jose State University — was founded as a Normal School in 1857 and became the first institution of public higher education in California. The newest campus — California State University, San Marcos — began admitting students in Fall 1990.

Responsibility for The California State University is vested in the Board of Trustees, consisting of ex officio members, alumni and faculty representatives, and members appointed by the governor. The trustees appoint the chancellor, who is the chief executive officer of the system, and the presidents, who are the chief executive officers of the respective campuses.

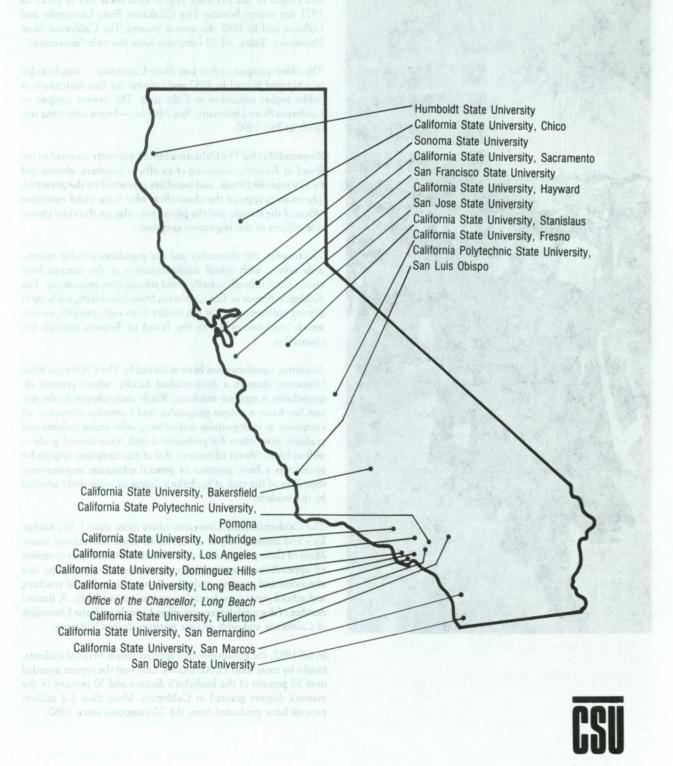
The trustees, the chancellor and the presidents develop systemwide policy, with actual implementation at the campus level taking place through broadly based consultative procedures. The Academic Senate of The California State University, made up of elected representatives of the faculty from each campus, recommends academic policy to the Board of Trustees through the chancellor.

Academic excellence has been achieved by The California State University through a distinguished faculty, whose primary responsibility is superior teaching. While each campus in the system has its own unique geographic and curricular character, all campuses, as multipurpose institutions, offer undergraduate and graduate instruction for professional and occupational goals as well as broad liberal education. All of the campuses require for graduation a basic program of general education requirements regardless of the type of bachelor's degree or major field selected by the student.

The California State University offers more than 1,500 bachelor's and master's degree programs in some 200 subject areas. Many of these programs are offered so that students can complete all upper-division and graduate requirements by part-time late afternoon and evening study. In addition, a variety of teaching and school service credential programs are available. A limited number of doctoral degrees are offered jointly with the University of California and with private institutions in California.

In fall 1992, the system enrolled approximately 347,000 students, taught by more than 17,000 faculty. Last year the system awarded over 50 percent of the bachelor's degrees and 30 percent of the master's degrees granted in California. More than 1.2 million persons have graduated from the 20 campuses since 1960.

## The California State University



## Campuses of The California State University

- California State University, Bakersfield
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  Bakersfield, CA 93311-1099
  Dr. Thomas A. Arciniega, President
  (805) 644-2011
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- California State Polytechnic University, *Pomona* 3801 West Temple Avenue Pomona, CA 91768
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(Vacant at press time) State Superintendent of Public Instruction 721 Capitol Mall, Sacramento, CA 95814

Dr. Barry Munitz Chancellor of the California State University 400 Golden Shore Long Beach, CA 90802-4275

#### Appointed Trustees

Appointments are for a term of eight years, except for a student Trustee, an alumni Trustee, and a faculty Trustee, whose terms are for two years. Terms expire in the year in parentheses. Names are listed in order of appointment to the Board.

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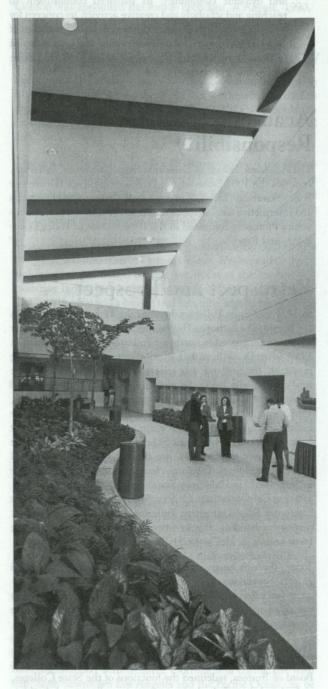
Dr. June M. Cooper Vice Chancellor, Human Resources and Operations

(818) 885-1200

Mr. Louis V. Messner Vice Chancellor. Business Affairs

Dr. Fernando C. Gomez General Counsel

## California State University, Fullerton



## Governance de la substanti de

Governance on the campus at California State University, Fullerton is the responsibility of the president and his administrative staff. Working closely with the president are a number of faculty and student groups which initiate, review, and/or recommend for approval, various university programs, policies, and procedures. Although the president is vested with the final authority for all university activities, maximum faculty and staff participation in campus decision-making and governance has become traditional. Students also are actively involved, with student representatives being included on almost all university, school, and departmental committees and policy-making bodies.

## Advisory Board

The California State University, Fullerton Advisory Board consists of community leaders interested in the development and welfare of the university. The board advises the president on a number of matters, particularly those affecting university and community relations. Members are appointed by the president for terms of four years.

Dr. Arnold Miller, Chair President,	
Technology Strategy Group	Fullerton
Evelyn F Bauman Vice Chair	Fullerton
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Attorney at Law	
Ackerman, Mordock & Bowen	Fullerton
Robert F Beaver	Fullerton
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## Philosophy and Objectives

Institutions of higher learning disseminate and advance knowledge. The philosophy which guides an institution can limit or promote the successful achievement of these objectives. Therefore, from its inception, Cal State Fullerton has consciously endeavored, through its educational program, to enhance the fullest possible development of those it serves. For both professors and students this entails a commitment to high standards of scholarship, to a comprehensive rather than a narrow approach in major areas of study, and to a concern with research and other creative activity.

The mission of CSUF, as articulated and adopted in the "Mission and Goals" statement of the campus is as follows:

- The University will develop and challenge students intellectually to help them understand their leadership role in a democratic society and their responsibility to be informed citizens. In addition, the University will provide appropriate preparation for careers and professions. Strong undergraduate degree programs in the traditional liberal arts and sciences disciplines as well as pre-professional and professional programs will be undergirded by a broadly based general education curriculum designed to educate every matriculated undergraduate student with regard to the history and diversity of human thought and culture. Postbaccalaureate work leading to degrees, credentials, licensures, and certificates will provide students with the depth of advanced knowledge needed within major discipline areas and professional fields.
- As a principal component of the University's mission, faculty emphasis must be on effective teaching sustained by ongoing scholarly development, original basic or applied research, and other creative and professional activities. Thus, the University recognizes and nurtures the involvement of each CSUF teacher/scholar in the activities carried on within his/her disciplinary community. Furthermore, the University recognizes the importance of the collegial and cooperative intellectual atmosphere that exists on this campus and will continue to foster this environment, thereby reinforcing individual effort directed toward excellent teaching and scholarly/creative endeavors. It also recognizes and supports the existence of diverse viewpoints in the University community and commits itself to defend the academic freedom of all faculty and students.
- The University is committed to a variety of activities which enhance the learning environment and quality of life for students, faculty, staff, alumni, and the people of our region. Thus, to further its missions, the University encompasses the library, computer facilities, research institutes/centers, the arts, athletics, recreation, and a variety of instructional, and student and alumni support programs. In addition, the University is committed to programs designed

to enhance "town-gown" relationships and provide other public services. Above all, however, is the obligation to create an institution which values morally and socially responsible actions and activities. The University is characterized by its dedication to the educational needs of a large and dynamic community, its balanced commitment to teaching and scholarly and creative activity, its concern for wide access to higher education, and its strong tradition of collegial governance. In the preservation and enhancement of these strengths lies the uniqueness of California State University, Fullerton.

## Academic Freedom and Responsibility

The Academic Senate of California State University, Fullerton, endorses the 1987 Statement of Professional Ethics (University Policy Statement 230.000) and the 1940 Statement of Principles and Interpretive Comments of the American Association of University Professors contained in the 1984 Edition of Policy Documents and Reports.

## Retrospect and Prospect

In 1957 Cal State Fullerton became the 12th State College in California to be authorized by the Legislature. The following year a site was designated in northeast Fullerton. It was purchased in 1959, when Dr. William B. Langsdorf was appointed as founding president, the first staff was selected and plans for opening the new college were made. Orange County State College started classes for 452 full- and/or part-time students in September, 1959, using leased quarters for its administrative offices on the Fullerton Union High School campus and for its classrooms at Fullerton's Sunny Hills High School. In the fall of 1960, the college opened classes on its own campus, where it occupied 12 temporary buildings. The name changed to Orange State College in July, 1962, to California State College at Fullerton in July, 1964, to California State College, Fullerton in July, 1968 and to California State University, Fullerton in June, 1972. The first permanent building, the six-story Letters and Science Building (now known as McCarthy Hall), was occupied in 1963.

Today, there is much dramatic evidence of additional, rapid growth. Several new buildings have been completed, and enrollment has climbed to 25,000. Since 1963 the curriculum has expanded to include lower division work and many graduate programs.

The Donahoe Higher Education Act of 1960 established the California State Colleges as a system under an independent Board of Trustees, redefined the functions of the State Colleges, and related them to both the community colleges and the University of California system.

In May, 1971, Dr. L. Donald Shields, who had served as acting president for seven months, was appointed the second president of Cal State Fullerton. Dr. Miles D. McCarthy became acting president in January, 1981; Dr. Jewel Plummer Cobb took office as the third president in October, 1981; and Dr. Milton A. Gordon was appointed the fourth president in August, 1990.

### Environment of the University

Fullerton, a city of more than 117,000 inhabitants, is located in northern Orange County, about 30 miles southeast of central Los Angeles. It is part of a new Southern California population center and within easy freeway access of all the diverse natural and cultural attractions of this region.

Orange County, with an area of 782 square miles, is the 48th in size of California's 58 counties, but it is the third largest county in population (2.4 million). Orange County has experienced during the last four decades almost unprecedented growth as communities continue to occupy the diminishing expanses of open land.

Today, there co-exists an interesting mixture of the old and new economic and life styles in Orange County. Underneath the soil, archaelogists and bulldozers uncover traces of the hunting and gathering Indian bands which flourished at least as early as 4,000 years ago in what was a benign and bountiful region. More visible traces remain of the Spanish and Mexican periods and cultures: Mission San Juan Capistrano, which began the agricultural tradition in Orange County, and subsequent adobes from the great land grants and ranches that followed. Additionally, both customs and many names persist from this period, and so does some ranching. The architectural and other evidences of the subsequent pioneer period are still quite visible: farmsteads, old buildings from the new towns that then were established in the late 1800's, mining operations, and traces of early resort and other types of promotional activities. For about 100 years, farming was the main economic activity with products such as grapes, walnuts, vegetables, and oranges, replacing the older wheat and cattle ranches. Today, agriculture still is very important. Orange County ranks high among California's counties in mineral production with its oil, natural gas, sand and gravel, and clay mining and processing activities.

The extensive development of the 42 miles of beaches in Orange County and the development of such attractions as Disneyland, Knott's Berry Farm, the Laguna Festival of Arts and Pageant of the Masters, the Anaheim Stadium and Convention Center and the Orange County Performing Arts Center continue to make tourism an increasingly important activity. So does the Mediterranean-type climate, with rainfall averaging 14 inches per year, and generally mild days (either freezing or 100- degree temperatures uncommon) with frequent morning fogs during the summer. Both downtown Los Angeles and the Pacific Ocean can be reached by car in half an hour, and mountain and desert recreation areas are as close as an hour's drive from the campus.

## The Campus and Its Buildings

Once part of a vast orange grove, Cal State Fullerton's attractively landscaped main campus now consists of 225 acres bounded on the south by Nutwood Avenue, on the west by State College Boulevard, on the north by Yorba Linda Boulevard and on the east by the Orange Freeway.

The portion of Orange County immediately surrounding the campus is predominantly suburban; it includes housing tracts, apartment complexes, shopping centers, industrial parks, and undeveloped hills and fields.

Other educational institutions also are part of the immediate environment. The Southern California College of Optometry, with its four contemporary buildings, opened in the spring of 1973. It is just north of Cal State Fullerton. To Cal State's immediate south is Pacific Christian College, a liberal arts school with a Bible emphasis, where students started classes in the fall of 1973. The Western State University College of Law, California's largest law school, occupied its new campus to the immediate west of Cal State in January, 1975.

The Cal State Fullerton campus itself has a high density urban layout of facilities developed to serve a predominantly commuting public. The university's modern buildings were planned so that no student should need more than 10 minutes to go from one class to another. The campus is surrounded with landscaped parking areas.

The first permanent building, the Letters and Science Building, was occupied in 1963. This imposing structure, master planned to serve ultimately as a facility for undergraduate and graduate science instruction and research, has been used to house other programs until they could warrant new facilities of their own. This building is now called Miles D. McCarthy Hall.

Since 1963, growth has been rapid. The Performing Arts Center was completed in 1964, the Physical Education Building in 1965, the Library Building in 1966, the Commons in 1967, the Humanities-Social Sciences Building and Visual Arts Center in 1969, William B. Langsdorf Hall (Administration-Business Administration) and the Engineering Building in 1971, the Student Health Center in 1974, the Education-Classroom Building and University Center in 1976, an addition to the Visual Arts Center in 1979, the Jewel Plummer Cobb Residence Halls and the Charles L. and Rachael E. Ruby Gerontology Center in 1988, and the Fullerton Marriott and the Computer Science Building in 1989. The Ruby Gerontology Center was the first building on campus financed solely by contributed funds; the Fullerton Marriott, a full-service hotel, resulted from a joint venture involving the Marriott Corp., the university and the City of Fullerton.

An expansion of the University Center and a sports complex featuring a multipurpose stadium, baseball pavilion, track and tennis courts were completed in 1992. A two-story laboratory

annex to McCarthy Hall and a five-story multiuse facility with classrooms, faculty offices and student and academic support services are due for occupancy in 1993. Major additions to the Library Building and the Physical Education Building are being planned as is a 1,200-seat performing arts building.

In the northeast corner of the campus is the Fullerton Arboretum, which was dedicated in the fall of 1979 in a joint venture with the city of Fullerton. It includes a 15-acre contoured botanical garden, a three-acre organic garden and a two-acre experimental plot. The ecologically arranged flora depicts habitats from the desert to the tropics. The Fullerton Arboretum also includes Heritage House, a restored 19th-century dwelling. Heritage House serves as a cultural museum for North Orange County as well as an Arboretum office.

The ample freeway and surface street accommodations that approach the main entrance to the university's campus also provide comparatively easy access to the great and diverse learning resources available in Southern California: many other colleges and universities; museums, libraries, art galleries; zoos; and the wide variety of economic, governmental, social, and cultural activities and experiments that may be found in this dynamic and complex region of California and the United States.

Information concerning the instructional, laboratory and other physical facilities which relate to the academic program may be obtained from the Office of Facility Planning and Construction.

## CSUF Mission Viejo Campus

The California State University, Fullerton-Mission Viejo Campus is located on the lower campus of Saddleback College in Mission Viejo. As a satellite campus of Cal State Fullerton, it serves the higher education needs of southern Orange County. The Mission Viejo Campus offers coursework at both the upperdivision (junior/senior) and postbaccalaureate levels. Lower-division (freshman/sophomore) coursework, including the lower-division General Education requirements must be taken at either the main campus in Fullerton, or at a community college.

Students who plan to attend the Mission Viejo Campus (MVC) must be admitted to California State University, Fullerton through the regular admissions process. Applications for admission to the University are available at both the main campus and the Mission Viejo Campus. Registration for MVC classes takes place through the regular University processes and can be accomplished at the MVC site.

Information regarding the University or MVC is available to students and prospective students in the MVC administrative offices located in Building H. This facility also houses offices for the faculty, staff and the MVC director.

Students enrolled at the Mission Viejo Campus receive all of the student services available at the main campus in Fullerton. MVC students are also eligible to use Saddleback College's Student Health Center, Library, and recreational facilities. The Assistant Dean for Student Affairs at MVC provides information on all student services and serves as ombudsman for all student con-

The University Library at MVC offers access to all materials contained in the main library at Fullerton. Students can access periodical articles through means of an extensive system of CD-Rom computer work station. The MVC library also has a collection of more than 400 periodicals on microfilm. Through Interlibrary Loan and other library services, students at MVC can access most academic libraries in the United States.

In one computer laboratory 18 Epson Equity-One computers are available for student and class use. In a second computer laboratory, 20 Macintosh computers are available for class use. The MVC computer center is on-line with the mainframe located at the Fullerton Campus, so that students can access all University computer services from the satellite campus.

For information, contact the CSUF-Mission Viejo Campus, 28000 Marguerite Parkway, Mission Viejo, California 92692 or telephone (714) 582-4990. Office hours are 8:30 a.m. to 7:30 p.m. Monday through Thursday, and 8:30 a.m. to 2:00 p.m. on

## Students of the University

Much of the distinctive character and learning atmosphere of any campus comes from the nature and vitality of its students. Diversity, the synthesis of academic with work and family interests, strong achievement records, and relative maturity are some of the predominant characteristics of the student body at Cal State Fullerton.

The university is primarily a commuter institution, with one oncampus residence facility which opened in the spring of 1988. Over 70 percent of the students work 20 or more hours per week, and yet 56 percent of all students take 12 or more hours of course work each semester. The majority of students live in Orange County. Of the fall 1992 new undergraduate students, 40 percent came from California high schools, 47 percent came from California community colleges, 7 percent from other Cal State campuses, 2 percent from other California colleges and universities, and 4 percent from other states or other countries. The fall 1992 new graduate students came from other Cal State campuses (56 percent), other California colleges and universities (23 percent), and other states or other countries (21 percent).

The student body is 9 percent first-time freshmen, 18 percent other lower division, 56 percent upper division, and 17 percent graduate levels. Fifty-six percent of all students are women. The median age of all students is 23; undergraduates have a median age of 22, while graduate students have a median age of 30. Over 40 percent of students take advantage of course offerings during the day and at night, in order to create a workable schedule for their multiple responsibilities.

Many students already have clearly defined interests in a major field of study. Only 7 percent of all students have not yet declared a major, and are in the process of exploring different fields of knowledge. During 1991-92, 4,188 undergraduates received their baccalaureate degrees, and 762 graduates received their master's degrees.

## The Faculty

Central to the effectiveness of any institution of higher learning is the quality and dedication of its individual faculty members to teaching and scholarship.

In the fall of 1991 there were 738 full-time faculty and administrators and 507 part-time faculty members teaching on the campus. Almost all the full-time faculty had some previous college or university teaching experience before coming to Fullerton. Faculty members also have a wide variety of experiences and creative activities. Over 90 percent of the tenured and tenure track faculty have earned their doctoral degrees.

Criteria for selection to the faculty include mastery of knowledge in an academic specialty, demonstrated skill and experience in teaching, and continuing interest in scholarly study and research. Retention and promotion criteria also include service to the university and community.

Information concerning the faculty and other personnel may be obtained from the Office of Faculty Affairs and Records.

#### Outstanding Professor Award

Each year the University selects a faculty member to receive the CSUF Outstanding Professor Award. This individual becomes the campus nominee for the statewide Outstanding Professor Award, an honor conferred annually on two system faculty by the by the Trustees of the California State University.

Below are the names of all professors who have received the CSUF Outstanding Professor Award. Those with an asterisk were also honored with the statewide award.

Donald Stanley Tull	Marketing
Miles Duffield McCarthy*	Biology
	History
	Foreign Languages & Literatures
Norman Townsend-Zellner	Economics
John Brown Mason	Political Science
	Psychology
Richard C. Gilbert	Mathematics
	Quantitative Methods
Fred M. Johnson	Physics
	English
	Art
	Economics
	Donald Stanley Tull Miles Duffield McCarthy* Giles Tyler Brown Gustave Bording Mathieu  Norman Townsend-Zellner John Brown Mason No award given Loh Seng Tsai Richard C. Gilbert Herbert C. Rutemiller Fred M. Johnson Willis E. McNelly* Donald E. Lagerberg Sydney Klein

1977-78	Charles G. Bell	Political Science
1978-79	Bruce H. Weber	Chemistry
1979-80	Michael H. Horn	Biology
1980-81	Donald A. Sears	Linguistics
1981-82	Joyce E. Pickersgill	Economics
1982-83	Carl C. Wamser And A syns	Chemistry
1983-84	Corinne S. Wood	Anthropology
1984-85	Maria Linder	Chemistry
1985-86	Charles C. Lambert	Zoology
1986-87	Glenn M. Nagel	Chemistry
1987-88	Harris S. Shultz*	Mathematics
1988-89	Warren A. Beck	History
1989-90	Roger Nanes	Physics
1990-91	Dr. Gerald F. Corey	Human Services/ Counseling
1991-92	Dr. Michael H. Birnbaum	Psychology

## President's Community Minority Affairs Advisory Council

The President of California State University, Fullerton has established a Council to assist and advise the President on matters of importance in meeting the educational needs of the constituent minorities represented in the Community and on the Campus. The Council is comprised of representatives selected from the distinguished leadership of the Community who are from various ethnic groups, public schools, businesses, churches, local civic organizations, student organizations, parent groups, and Campus groups.

Frank Dominguez, Chair Director, United Way Hispanic Development Council	
John Hobgood, Vice Chair, Programs	
Communications Consultant	
Toni Miller, Vice Chair, Membership	
Counselor, John Glenn High School	
Jo Caines garanestanos est bas asmines	
Director of Community Relations,	
KOCE-TV	
Maggie Carrillo Mejia Principal, Savanna High School	Director, Tel
Principal, Savanna High School	Anaheim
Tsu-Tsair O. Chi	
Owner, Chi Enterprises	Anaheim
Tina Fernandez	
Specialist, Orange County Human Relations Commission	
Relations Commission	Santa Ana
Ben Franco Assistant Principal,	
John Glenn High School	Norwalk
Marian Harloe	
Commissioner, Orange County 190/190	Admissions (
Human Relations Commission	Santa Ana
Albert Perales	
Counselor, Kraemer Junior High School	
Chieu Minh Pham	A do notosaid
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Educator	Orange

## University Administration

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President	1
Staff Assistant Norma Morris	S
Evecutive Assistant Judith A. Anderson	n
Director of Affirmative Action	0
Administrative Assistant F. Caroline Cosgrove	e
Director of Athletics Bill Shumard	d
Associate Director/Senior Woman Administrator	h
Associate Athletic Director for Marketing and Development and Director, Titan Athletic Foundation Larry Zucker	er
Director of Operations and Compliance	11
Assistant Athletic Director for Media Relations	5
Director of Budget Planning and Administration	11
Assistant Director E. Sue Boelt	tl
Administrative Assistant	n
Budget Applyst Linda Erickson	n
Budget Applyst Michele L. Janie	el
Systems Analyst Keiko lakahash	11
Payroll Supervisor Vacan	nt
Vice President for Academic Affairs	er
Associate Vice President, Academic Affairs	3)
Staff Assistant Marlys K. Rietman	n
Coordinator Faculty Affairs and Records	rs
Associate Vice President, Academic Programs	g)
Assistant Vice President/Graduate and International Programs William W. Fladda	la
Director of Graduate Studies	es
Coordinator, Undergraduate Studies	li
Coordinator Health Professions Albert Flore	es
Director of Athletic Academic Service	ny
Prelaw Adviser Harvey Grod	dy
Coordinator, Special Projects	nt
Dean Extended Education	n
Discourse of Eutomaion Administration	tv
Director of Extended Education Program Services	nt
Thrector of Certificate Programs	
Director of Program Management	1g
Director of Corporate and Public Education Iom O'Net	111
Director of Seminars and Teleconferencing	ey
Associate Vice President, Information and Telecommunication Services	el
Director, Administrative Computing Bobbe Webe	er
Director Telecommunications Dick Bedna	ar
Coordinator Instructional Services	nt
Operations Manager Vacan	nt
University Librarian Richard C. Pollar	rd
Associate University Librarian Patricia L. Bril (Acting	g)
Collection Development Officer  Chair, Public Services  Patricia L. Br Chair, Public Services  Francisco Garcia Ayver	ril
Chair Public Services Francisco Garcia Ayver	ns
Chair, lechnical Services	
Director of Admissions and Records James C. Blackoul	111
Assistant to the Director of Admissions and Records	nt
Admissions Officer Nancy Dori	ity
I Injugarity Articulation/Project Assist Officer	)CI
Registrar Carole Jon	nes
Assistant Registrar	sty
Director of Apalytical Studies Dolores Hope Vu	ıra
Associate Director of Analytical Studies	tta

Director, Faculty Research and Development Stuart A. Ross Coordinator, Contracts and Grants Elizabeth Gewin
Director, Center for Internships and Cooperative Education
Director, Center for Internships and Cooperative Education
Radiation Safety Officer
Director, Student Academic Services and
Director, Student Academic Services and University Outreach
Associate Director, Student Academic Services and
Associate Director, Student Academic Services and University Outreach
Coordinator, Student Academic Services
Coordinator, Student Study Center Fran Zaraeh-Smith
Coordinator, University Outreach Services and Relations with Schools and Colleges
Director of Television and Media Support Center
Instructional Television and Media Production Lee Bentley (Acting)
Audio Visual Distribution and Maintenance
Vice President for Administration
Insurance & Facility Use Officer
Associate Vice President, Facility Planning & Construction
Facility Planner
Director, Design & Construction Services
Controller
Assistant Controller Lydia L. Rodriguez
Supervisor, Accounts Payable
Supervisor, General Accounting
Supervisor, Student Aid Accounting, Receivables and Disbursements
Supervisor, Student Aid Loan Collection
Manager, Cash Management
Procurement and Logistical Services Manager
Supervisor, Purchasing
Supervisor, Shipping/Receiving/Stores
Supervisor, Campus Mail Services Center Edward A. Flynn
Supervisor, Property/Recycling/Moving Services
Director, Human Resources
Associate Director, Employee Relations Manager Emily E. Gilbert
Classification
Employee Benefits/Employment
Employee Benefits/Employment
Performance Appraisals
Workers' Compensation/Employee Documents
Recruitment
Training and Development, Temporary Help
Director, Physical Plant
Associate Director, Plant Operations & Engineering
Assistant Director, Operations
Manager, Budget, Personnel and Projects
Director, Public Safety
Environmental Health & Safety Officer
Manager, Transportation/Parking/Visitor Information
Executive Director, Foundation
Human Resources Manager Patricia A. Byrd Director, Finance Shawn J. Farr
Business Operations Manager Jean M. Tebbe Accounting Manager Joan Simmons
Director, Grants and Contracts
Total Associate Denn Ford Academic Altaus

Titan Bookstore and Titan Shops Assistant Director, Book Division
Assistant Director, Book Division Hani F. Sayegn
Assistant Director, General Merchandise Division Jerry C. Olson Assistant Director, Food & Vending Services Warren L. Corse
Manager, Computing Technology
Assistant Director, Food & Vending Services
Director, Dining Services
(Campus Food Services)
Vice President for Student Affairs
Associate Vice President for Student Affairs
Assistant Vice President for Student Affairs
Assistant vice President for Student Affairs Vacant  Administrator for Associated Students
Coordinator, Academic Appeals
Director, Career Development Center
Director, Financial Aid
Director, Disabled Student Services
Director, Housing and Residence Life
Director, International Education and Exchange
Director, Student Health and Counseling Service
Director, Testing and Research Lee Broadbent (Acting)
Director, University Activities Center
Director, Women's Center
Vice President for University Advancement
Director of Alumni Relations
Director of Individual Giving
Director of Corporate and Foundation Relations Leo H. Cullum
Director of Public Affairs
Director of Special Giving
Evecutive Director of Titan Athletic Foundation
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School of the Arts  Dean Jerry Samuelson Associate Dean Frank E. Cummings, III Assistant Dean, Student Affairs Nancee L. Benson Art Department Darryl J. Curran
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School of the Arts  Dean Jerry Samuelson     Associate Dean Frank E. Cummings, III     Assistant Dean, Student Affairs Nancee L. Benson Art Department Department Darryl J. Curran     Music Department Benton Minor Theatre Department Sallie Mitchell  School of Business Administration and Economics  Dean Ephraim P. Smith     Associate Dean, Undergraduate Programs Dorothy Heide     Associate Dean, Graduate Studies Richard Stolz
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School of the Arts  Dean

Associate Dean for Administration
Civil Engineering Department
Computer Science Department Edward Sowell
Electrical Engineering Department
Mechanical Engineering Department
School of Human Development and Community Service
School of Human Development and Community Service  Dean
Counseling Department George Williams
Educational Administration Department
Elementary and Bilingual Education Department
Health, Physical Education and Recreation Department
Nursing Department Julia B. George
Reading Department Ashley Bishop, Coordinator
Secondary Education Department
Special Education Department Leo Schmidt
Child Development Department
Human Services Program Soraya Coley, Coordinator Military Science Program Major John Sarnecky, Coordinator
University Recreation Program
School of Humanities and Social Sciences
School of Humanities and Social Sciences  Dean (Acting)
Dean (Acting) Chris Cozby
Associate Dean
Afro-Ethnic Studies Department J. Owens Smith
American Studies Department
Chicano Studies Department
Conservation Program Imre Sutton, Coordinator
Criminal Justice Department Sandra Sutphen
English and Comparative Literature Department
Foreign Languages and Literatures Department
Geography Department
History Department Frederick Miller
Linguistics Department
Philosophy Department Merrill Ring Political Science Department Sandra Sutphen
Psychology Department Daniel W. Kee Religious Studies Department Merrill Ring
Sociology Department
Environmental Studies Program Dennis Berg, Coordinator
Gerontology Program Jessie Jones, Director
Latin American Studies Program Sheldon Maram, Coordinator
Liberal Studies Program
Pacific Rim Studies
Russian and East European Area Studies Program
M.A. in Social Sciences Program
Women's Studies Program Diane Ross, Coordinator School of Natural Science and Mathematics
Dean
Associate Dean
Biological Science Department C. Eugene Jones Chemistry and Biochemistry Department Glenn Nagel
Geological Sciences Department
Mathematics Department
Physics Department Mark Shapiro Mark Shapiro
Science Education Program Eric Streitberger, Coordinator

## California State University, **Fullerton Foundation**

The California State University, Fullerton Foundation was established and incorporated as a not-for-profit corporation in October 1959. The Foundation is an auxiliary organization of the university established to provide essential student, faculty and staff services which cannot be provided from state appropriations. It also supplements the program and activities of the university in appropriate ways by assisting the university in fulfilling its purposes and in serving the people of the State of California especially those in the immediate Fullerton area.

Some of the activities in which the Foundation assists the university are developing and administering research and educational grants and contracts; conducting bookstore, food service and vending operations on campus; accumulating and managing endowment and student scholarship funds; and administering various educationally related functions and special programs such as the Tucker Wildlife Sanctuary.

The Foundation's overall policies are administered by a Board of Directors composed of members of the university faculty, administration and students as well as prominent community leaders.

## Board of Directors

David L. Palmer, Chair# Sal D. Rinella, Vice Chair\* Gary R. Del Fium, Secretary# Shawn J. Farr, Treasurer\* (ex officio) William M. Dickerson, Executive Director\* (ex officio) Ted Bremner# Bert C. Buzan\* Clare G. Carlson# Edward J. Carpenter# Robert F. Clark, Ir.# Donald B. Crane\*\* Patti Ersek† Barbara Finlayson-Pitts\*\* lovce Flocken\*\* Milton A. Gordon\* Kolf O. lavaweera\* Marc Mitzner† Robbie L. Nayman Robert Ostengaard# Walter J. Pray# Joe Purtell†

\*Administrator \*\*Faculty †Student

Don A. Schweitzer\*

#Community Member

### Administrative Officers

William M. Dickerson, Executive Director Shawn J. Farr, Director of Finance

### CSUF Alumni

Five students were first to graduate from Cal State Fullerton, becoming the Class of 1960. Since then, over 95,000 graduates have passed through the university.

CSUF alumni have a vested interest in their university. They have been part of its past, belong to its present and are working for its future. Representing those alumni is the CSUF Alumni Association, a membership organization whose mission is to provide alumni with opportunities for continued affiliation with the university.

Since its inception the organization has served to advance the university's interests through alumni talents, services, energies and financial assistance to nurture and enhance the academic setting in a way that directly benefits students. The group promotes alumni involvement on campus and honors outstanding student, faculty, staff and alumni achievement.

Association members receive numerous benefits including access to the CSU libraries and career services; discounts to campus athletic events and the performing arts as well as invitations to special campus events.

## Community Support Groups

California State University, Fullerton welcomes and encourages the development and activities of volunteer organizations committed to enriching university life. The expertise and efforts of its dedicated volunteers are most appreciated for they enhance the quality of the educational experience for Cal State Fullerton students and help ensure the university's academic excellence. In addition to their involvement in the programs of their own organizations, support group members are invited to participate in university events.

Cal State Fullerton's volunteer organizations form the Coordinating Council of Support Groups, which assists members in promoting their individual group's goals and in coordinating activities and communication between themselves and the university. Further information about support groups may be obtained from the Office of University Advancement located in Langsdorf Hall 805 at (714) 773-2108.

#### Art Alliance

The Art Alliance encourages excellence in the arts, particularly through the educational curriculum of the university's Art Department. Organized in 1967, the alliance assists in financing gallery exhibitions, administers the Art Gallery Docent Program, participates in the acquisition of campus art works and annually awards scholarships and graduate reserach grants. Art Alliance members host special exhibit tours and receptions, informal talks by faculty members and trips to museums and artists' studios.

#### Continuing Learning Experience

Continuing Learning Experience was formed in 1979 by retired and semiretired individuals dedicated to the pursuit of lifelong learning in a high-level educational environment. Entirely self-supporting, CLE offers study groups and discussion forums of educational and special interest to the community, as well as a Distinguished Lecture Series, classes and trips. Members also can participate in SeniorNet, a computer networking program, and the Wellness Clinic. The CLE office is housed in the Ruby Gerontology Center, a research and conference facility built with private funds in large part from CLE members.

#### Emeriti

Cal State Fullerton's retired faculty and staff members belong to the Emeriti, which is dedicated to keeping its members involved and knowledgeable about current campus life. While providing opportunities to be involved in faculty governance, curricular programs and campus activities, the organization also offers renewal of friendships between its members. Through affiliation with the systemwide CSU emeriti organization, ERFA, emeriti concerns are presented to all branches of the government and the Chancellor's Office.

#### **Executive Forum**

The membership of the Executive Forum is composed of chief executive officers and senior executives in California, who advise and assist the university president on matters relating to improving education and research at Cal State Fullerton. Its members recommend measures and actions to stimulate and promote better relationships with the business community, as well as improve California's quality of life.

#### Friends of the Fullerton Arboretum

Friends of the Fullerton Arboretum support a 26-acre ecological preserve located on the northeast corner of campus. The friends host demonstrations, lectures and tours of the arboretum and Heritage House, a turn-of-the-century residence listed in the National Register of Historic Places and the Inventory of California Historic Sites. Through plant sales, special activities and management of the arboretum's gift and garden shop, the Friends contribute operating monies for the arboretum and fund student scholarships, grants and internships.

#### Music Associates

In support of the Music Department, Music Associates fund student scholarships; an annual award contest recognizing excellence in vocal, instrumental and piano performance; and purchases of equipment and instruments to enhance Cal State Fullerton's music program. Associates attend campus performances and co-sponsor one of the biggest holiday events on campus, the "Christmas Carol Candlelight Dinner and Concert" featuring the University Singers. The Associates also hold an annual spring scholarship luncheon.

## Patrons of the Library as super lady and and and and

Community members, alumni and faculty and staff members interested in maintaining the quality of the University Library belong to the Patrons of the Library. The group sponsors exhibits and holds an annual book sale and luncheon. Funds raised through book sales, dues and donations support the augmentation of library holdings and facilities.

#### Patrons of the Museum of Anthropology

Patrons of the Museum of Anthropology take a hands-on approach to their university support. Members are often found in the back room of the museum, putting the finishing touches on yearlong exhibits. Patrons also regularly take tours and field trips to excavation sites and host lectures by leading archaeologists and researchers.

#### President's Associates

President's Associates is an organization whose members are committed to providing quality higher education at Cal State Fullerton. Membership contributions enable the university to offer cultural and educational programs, student scholarships, faculty research grants and recognition awards to outstanding students and faculty members. Annual activities include an October reception and a May luncheon, when President's Scholars are named. The scholars program, funded by the Associates, recognizes a select group of students for academic and extracurricular performance.

#### Reading Educators' Guild

Graduates who earn a master of science in education with a concentration in reading and other interested individuals are eligible for membership in the Reading Educators Guild. Working in close relationship with the Reading Program, the guild promotes research in the reading field. Throughout the school year, the Guild holds various activities, lectures and conferences.

#### School Advisory Councils

Advisory councils are composed of community and campus leaders who are committed to sharing their expertise and providing support to individual schools within the university. Groups include the School of Business Administration and Economics

Executive Council, School of Communications Executive Advisory Board, School of Engineering and Computer Science Industrial Advisory Board, School of Human Development and Community Service Community Advisory Council, and School of Natural Science and Mathematics Advisory Board.

#### Titan Athletic Foundation

The Titan Athletic Foundation exists solely to aid the athletic program at Cal State Fullerton. The foundation is composed of individuals who have a genuine interest in athletics, the university, and the community and support athletics by providing funds for scholarships that ensure an effective recruiting program.

#### Tucker Wildlife Society

The Tucker Wildlife Society supports the Tucker Wildlife Sanctuary in the Modjeska Canyon in the Santa Ana Mountains. Its members assist the sanctuary in offering programs that support the environment, save wildlife and provide outdoor education for thousands of children. A research center for biological field studies, the facility also offers continuing educational service to the community, teacher education in nature interpretation and conservation education, and training of students planning to enter the public service field.

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## Academic Affairs

California State University, Fullerton provides a diversity of educational opportunities to satisfy the broad range of backgrounds and interests of its students and to meet the continually changing and ever growing demands of not only our local community and the state, but to accommodate the increasingly significant national and global expectations as well. The academic programs available include 45 bachelor's degrees, 44 master's degrees, 47 minors, 3 resident certificates and 13 teaching credential programs.

The mission of the University is to provide excellent educational opportunities to its students to enable them to develop intellectually, personally and professionally. To this end, the University is committed to attracting and retaining a diverse student body and faculty for all of its programs. Fundamental to these endeavors are excellence in instruction, actively involved faculty, and adequate support for the instructional mission.

Academic excellence is provided in the various specializations offered by the University by encouraging departments and professional schools to develop programs for their majors through a formal process that ensures careful and thoughtful review by various levels of the University. The General Education Program is designed to assure that graduates have made significant progress toward being a well-educated person by integrating into the major programs a relative balance in strength of required courses in the physical sciences, the social sciences, the humanities and the fine arts. These courses are planned to complement those offered through the major programs and electives. Articulation agreements with the local community colleges clarify the courses that will be accepted for credit in both general education and major programs.

## Vice President for Academic Affairs

McCarthy Hall 133 (714) 773-2614

The Vice President for Academic Affairs is responsible for the leadership and coordination of all campus academic matters. The Vice President is the chief academic officer for the campus and is directly involved in the areas of curriculum development, faculty personnel processes and budget and resource allocation as they pertain to instruction and academic support.



The academic vice president works closely with the President, the academic associate vice presidents, deans, and program directors regarding all instructionally related planning and operational matters. Related responsibilities include: (1) oversee the development and review of curriculum and educational and professional policy; (2) instructional resource administration relating to staffing, operating expenses and equipment; (3) assuring that all faculty and academic staff personnel actions reinforce and complement the qualitative objectives of the university while meeting its strong commitment to the principles and spirit of affirmative action; (4) administration of academic support services such as the library, admissions and records, extended education, computer center, and student EOP and affirmative action programs. As chief academic officer, the Vice President reviews department and faculty Personnel Committee recommendations, in order to make final recommendations to the President on all faculty and tenure considerations as well as other academic personnel actions as required by university policy.

Information concerning the academic programs of Cal State Fullerton may be obtained from the Office of the Vice President for Academic Affairs. This information may include:

- 1. The current degree programs and other educational and training programs;
- 2. The instructional, laboratory, and other physical plant facilities which relate to the academic program;
- 3. The faculty and other instructional personnel;
- 4. Data regarding student retention at Cal State Fullerton and, if available, the number and percentage of students completing the program in which the student is enrolled or has expressed interest; and
- 5. The names of associations, agencies or governmental bodies which accredit, approve, or license the institution and its programs, and the procedures under which any current or prospective student may obtain or review upon request a copy of the documents describing the institution's accreditation, approval or licensing. The last and the garrens and the garren

## Academic, Graduate and **International Programs**

McCarthy Hall 129 hour gristia viluosi (714) 773-3602

The Office of Academic, Graduate and International Programs coordinates the development of educational programs; provides an all-university perspective on educational activities at the campus; and stimulates academic innovations.

The Associate Vice President, Academic Programs, and the Assistant Vice President, Graduate and International Programs, are responsible for administering university policies and regulations dealing with undergraduate and graduate curricula; fostering and administering institutional exchange programs with foreign universities; preparing and publishing the university catalog; and serving as liaison to the Western Association of Schools and Colleges (WASC) and other accrediting agencies.

The Office of Academic, Graduate and International Programs provides leadership for the Curriculum Committee, General Education Committee, Graduate Education Committee, International Education Committee and other groups and individuals concerned with changing and improving the educational programs of this institution. Responsibilities relating to the Chancellor's Office include regular review and updating of the Academic Master Plan; coordination of program performance review; and staff reports for the Chancellor's Office relating to academic planning.

#### Academic Senate

McCarthy Hall 143 (714) 773-3683

The Academic Senate is an integral part of the University governance processes which encourage participation in collegial decision making. The Senate develops, formulates and reviews educational and professional policy which becomes university policy if approved by the President. Educational and professional policy includes: curricula; academic standards; criteria and standards for the selection, retention, and promotion of faculty members; academic and administrative policies concerning students; and allocation of resources. There are 14 standing committees of the Senate and three general committees of the faculty. The Senate consists of 45 members including the University President, Vice President for Academic Affairs, two Associated Students representatives, and 41 elected members representing various campus constituencies.

The 14 standing committees of the Academic Senate are: Academic Standards Committee, Budget Advisory Committee, Computing Affairs Committee, Curriculum Committee, Elections Committee, Extended Education Committee, Faculty Affairs Committee, Faculty Development and Educational Innovation Committee, General Education Committee, Graduate Education Committee, International Education Committee, Library Committee, Long Range Planning and Priorities Committee, and Student Academic Life Committee.

#### Admissions and Records

Langsdorf Hall Lobby (714) 773-2300

The Office of Admissions and Records is responsible for the administration of the admission, registration, records, and services to undergraduate and graduate students in the regular sessions of California State University, Fullerton. These programs and services provide preadmission guidance to prospective students and current information about the university's curricula and requirements to school and college counselors; admit and readmit students within enrollment categories and priorities; evaluate the applicability of undergraduate transfer credit toward all-university requirements of the curriculum; provide liaison in the identification and resolution of articulation problems of transfer students; register student programs of study, including enrollment into classes; maintain academic records; administer academic probation and disqualification policies; provide enrollment certifications on student request, including transcripts of academic records, to the Veterans Administration and for other purposes; certify the completion of degree and credential requirements; receive petitions for exceptions to academic regulations; and provide information about these programs and services.

## **Analytical Studies**

McCarthy Hall 136 (714) 773-2121

The Office of Analytical Studies is responsible for the organization, analysis, and presentation of the information and data essential for the support of campus policy formulation, resource allocation, and short- and long-range planning. The office participates in the development and enhancement of institutional information data base systems, and conducts descriptive and analytic research on campus trends, program and policy effectiveness, and a variety of institutional characteristics, as required by the President and the Vice President for Academic Affairs.

Among the institutional data with which the Office of Analytical Studies is concerned are student and faculty demography, student progress, enrollment, curriculum and scheduling, space and facilities utilization, testing, workload, regional demography, affirmative action, budget and program performance review.

The Office of Analytical Studies produces and publishes regular campus reports such as the Statistical Handbook, as well as relevant reports required by the Chancellor's Office and other agencies.

## Computer Center

McCarthy Hall 38 On ordered level of the control of

The Computer Center is located in the basement of McCarthy Hall. The campus has two separate mainframe computers: a DEC VAX 6430 for instructional purposes and an IBM 3090-150E for all on-line administrative data processing for the University. Also available for instructional support are two AT&T 3B2 UNIX machines. Instructional users have access to such software applications as SPSS-X, SAS, SPICE, BMD, STRUDL, and a variety of other discipline-specific programming tools.

Students have access to these central computing resources from over 1000 micro-computers and terminals connected to the campus data communications network. Open-access satellite labs are

located in each building, allowing students convenient computer-related services. Computer workshops are conducted to train and assist students in the proper use of computing equipment.

### University Extended Education

Extended Education/Personnel Services Building (714) 773-2611

University Extended Education offers the resources of the university to degree-seeking students and other lifelong learners through programs supported by participant fees, grants, and contracts. It is a self-supporting, not-for-profit division of the university which receives no state funding. Programs include summer session, intersession, extension credit and non-credit courses, certificate programs, adjunct enrollment, and contract courses. Many Extended Education programs incorporate computer and television technologies in the delivery of instruction and can be made available to off-campus locations. Courses are taught by university faculty, visiting faculty, and practicing professionals. Most Extended Education programs are open to any adult and selected high school students. Additional information concerning University Extended Education programs may be found in the Academic Programs section of this catalog.

### **Graduate Studies**

McCarthy Hall 129 (714) 773-2618

The staff of the Office of Graduate Studies assists students in answering questions about admission, academic policies and procedures, graduate programs, financial assistance, student services, and other matters of concern to applicants or graduate students. The office is also responsible for performing an evaluation of student programs at classification and completion of requirements for authorizing award of degree.

The Assistant Vice President for Graduate and International Programs is the appropriate university authority for coordinating and administering all matters related to graduate degree curricula. This position is guided by the policy recommendations of the Graduate Education Committee.

## Faculty Affairs and Records Value Of McCarthy Hall 142

McCarthy Hall 142 (714) 773-2125

The Office of Faculty Affairs and Records is the official repository for documents and correspondence concerning full-time teaching and administrative faculty. It has responsibility for retaining documentation pertaining to employment, reappointment, tenure, promotion, leaves of absence, grievances, disciplinary actions and separations.

## Faculty Research

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The Office of Faculty Research and Development provides assistance to faculty and staff in their efforts to obtain funding for research and other scholarly activities. The office offers pre-proposal consultation, information about funding opportunities and assistance with budgets, regulatory compliance, technical design, and editing of proposals. It also publicizes and administers intramural research grants. A small library is maintained in Mc-Carthy Hall 112 to aid faculty in identifying grant resources, and agency/foundation grant profiles.

### **International Programs**

McCarthy Hall 129 (714) 773-2618

The Office of Academic, Graduate and International Programs serves as the focus for all aspects of the University's commitment to academic internationalization. It is responsible for overseeing and directing the internationalization of the curriculum. It also initiates and administers contacts with sister institutions throughout the world in order to foster the exchange of faculty and students.

For more information on specific opportunities to study abroad, either through the CSU system-wide International Program or direct links that CSU Fullerton has with foreign institutions, see the section of this catalog titled "International Programs" on page 166.

### Television & Media Support Services

Library 80 (714) 773-2621

The Television and Media Support Center (TMSC), located on the lower level of the Library building, offers a wide spectrum of media services and equipment.

Audiovisual equipment available to faculty include projectors for motion pictures, 35 mm, slides, opaque materials and transparencies; audio and video tape players; and small sound systems. A wide range of film and video materials are also available.

Design and production services are available for a wide range of media. Graphics design is supported by computer technology and offers top-level design of maps, charts, diagrams, technical drawings, flow charts, etc., including camera ready copy and overhead transparencies. Photography offers studio and location photography, copy work, slide duplication, film processing, black and white printing, and slide tape production. Video services includes VHS recording of campus events and tape duplication. Audio services include audio recording and amplification, and audio duplication and editing. Television production includes the design and production of instructional and information modules for use in the classroom, on The Titan Cable Channel, and other video delivery systems. Pre- and post-production services are available.

Instructional television delivery systems include Interactive Televised Instruction (ITI), video teleconferencing, and the Titan Cable Channel (TTC) and video teleconferencing. Two classrooms are designed and equipped for distance education and currently delivery university classes to the Mission Viejo and other off-campus locations including workplace classrooms in businesses and industry. Special telephone connections allow students not located in the classroom on the Fullerton campus to interact with instructors as well as with on- and off-campus classmates in a "live" exchange of information and ideas.

Satellite teleconferencing is provided in conjunction with Distance Learning in Extended Education. The Titan Cable Channel network makes CSUF programming available in communities throughout Orange County such as Comcast, Multivision, Century Cable, Seal Beach Cable Communications Foundation. and Paragon Cable.

For detailed information, contact and Television and Media Support Center.

## The University Library

Library 229 (714) 773-2714

Chief among the learning resources on the campus is the University Library. The six-story building located in the center of the campus houses a collection of over 700,000 books and bound periodicals, as well as one and half million other items: government documents (federal, state, local, and international); maps; microforms; and non-print materials such as kits, videotapes, phonorecords, compact discs, audio tapes, and film strips. Books and other materials are selected through the joint efforts of instructional and library faculty to support the undergraduate and graduate programs of the University. In addition to these general collections, special and supplemental collections designed to support both the curriculum and instructionally-related research have been developed.

The student identification card issued by the University serves as a library card for checking out books and other materials. Cards must be validated each semester at the library circulation center. The loss or theft of the student ID, as well as any change of address, should be immediately reported at the library circulation counter; early reporting of a lost ID will reduce the risk of misuse of the card. Library users are responsible for the return of all materials charged out on their ID cards. Since all library materials are subject to recall after two weeks, they should be returned to the University Library if there is need to be absent from campus for more than this length of time.

Primary access to the University Library's holdings is provided by the electronic Online Public Access Catalog (OPAC). The OPAC provides access to books, government documents and other materials through author, title, subject and other indexes. The OPAC also provides a listing of materials required or recommended for course-related reading and available for limited loan periods through the Reserve Book Room. General information, such as the hours the Library is open, is also available on this file. One can search the OPAC not only on terminals in the Library building, but also through dial-up access from remote locations on and off campus.

Subject access to periodicals and similar types of literature is provided through printed indexes and abstracts, and through electronic CD-ROM databases housed in the Reference Section. Access to remote databases is provided through the Computerized Information Retrieval Service (CIRS), a fee-based service offered by the Reference Section.

As part of the curriculum, the University Library offers courses in bibliographic research, including Library 200 (Elements of Bibliographic Investigation). Tours and lectures for individual classes are given at the request of the faculty. In addition to formal instruction in bibliographic research, general and subjectspecialized reference and research services are provided by the library faculty.

The University Library

For the convenience of users photocopiers and microform readerprinters are available in locations throughout the University Library. These are operable with coins or electronically encoded copycards that may be purchased in the Library's lobby. Other specialized facilities include music listening rooms, videotape viewing equipment, group study rooms, and a microform reading

In addition to the many resources available on campus, mutual use agreements make accessible to students and faculty the library collections of the nineteen other libraries in the California State University system, the closest University of California campuses (Irvine and Riverside), and neighboring institutions such as Fullerton College. Intralibrary services provide easy access to library resources both at and from the Mission Viejo Campus. Interlibrary borrowing arrangements with major university and research libraries throughout the country further expand the resources available to the CSUF community.

More detailed information about the University Library and its services is available at the Reference Desk located on the first

## Student Academic Affairs



Program) is Student Academic Services. These support services

#### Academic Advisement Center

Humanities 112 (714) 773-3606

The Academic Advisement Center provides information and guidance in the choice of an undergraduate major, a school of interest, or selection of elective and general education courses. It is the administrative center for undergraduate students who have not declared a major or school of interest. Refer to the Academic Advisement section for additional information.

## Student Academic Services and University Outreach

Library (lower level) 18 (714) 773-2484

The primary responsibility of Student Academic Services and University Outreach is the recruitment and retention of students at California State University, Fullerton. Inherent to this mission is the strict attention that must be given to increasing the number and graduation rates of underrepresented students. Moreover, the unit is assigned much of the responsibility for coordinating institutional efforts in providing educational opportunity for all students.

The Student Academic Services and University Outreach Office develops and coordinates a comprehensive program of outreach services and activities which assist to make the university more visible, attractive, and accessible to all potential students. A number of programs have been consolidated under this office. These are described on the following pages.

### Athletic Academic Services

Physical Education 130B (714) 773-3057

As an integral part of the CSUF student advising system, the Office of Athletic Academic Services provides advisement for student-athletes; provides referrals to campus academic support units; and conducts programs which are designed to assist student-athletes in meeting their academic goals.

## Center for Internships and Cooperative Education

Langsdorf Hall 210 (714) 773-2171

The Center for Internships/Cooperative Education was established to offer students the opportunity to formally integrate academic training with practical work experience prior to graduation. The Internship/Co-op Program offers students an opportunity to expand their knowledge and skills in a "real work" situation which better prepares them to select a career and successfully enter the job market. Through academic study and practical experience, students can enhance their academic knowledge, personal development, and professional preparation. Other valuable benefits of an internship co-op are to:

- 1. gain work experience;
- 2. network and develop industry contacts;
- 3. earn academic credit:
- 4. solidify academic and career goals;
- 5. earn money while learning;
- 6. explore various career options within a major.

The program involves the cooperative efforts of both faculty and employers in the creation of opportunities for students that fulfill academic and professional needs. Each internship/co-op is supervised and monitored by the employer, while faculty coordinators provide guidance to students to insure the academic integrity of the work experience.

There are two internship/co-op program options: parallel and alternate. Students can work part-time while attending regular classes or full-time for a semester and can continue classes the following semester. Most assignments are salaried positions and consequently assist the student to finance their educational expenses.

CSUF currently has 39 academic programs that offer internships/ co-op in fields from the arts to the sciences. To participate in the internship/co-op program a student must:

- 1. be at least in the junior year of study;
- 2. be in good academic standing;
- 3. receive approval from a faculty coordinator;
- 4. enroll in the departmental internship/co-op course.

The internship/co-op must be consistent with the goals of the student's academic discipline. In most departments up to six units of internship/co-op credit may be earned. With faculty coordinator approval, students may also be able to receive credit if currently employed in a job relating to their academic major. Students should not wait until their final semester to participate!

For further information, contact the Center for Internships/Cooperative Education. The Center is open 8:00 a.m. to 5:00 p.m., Monday through Friday.

### Educational Opportunity Program

Library (lower level) 20 (714) 773-2784

The Educational Opportunity Program (EOP) is primarily a "Special Admissions" program available to California residents who meet the state residency requirement as determined by the CSU Office of Admissions and Records. EOP is designed to provide information regarding admission, financial assistance, and supportive services to prospective undergraduate students who have potential to perform satisfactorily at the university level, but who might be prevented from doing so because of economic, educational and environmental disadvantages.

EOP gives each of the students individual attention. It uses knowledge of the students' distinctive patterns of social behavior, learning styles, motivations, and aspirations to assist them in realizing their full potentials.

#### Advisement Services

The EOP advisement component, (See Student Academic Services), is one key to the effectiveness of the EOP. Peer mentors, working under the direction of professional staff, serve as important liaisons between each EOP student and the university as a whole. Assistance and guidance are provided to help the student resolve academic, social, financial and personal problems. The EOP component of the Academic Services Center also serves as a referral point to direct students to the appropriate support services, e.g. Financial Aid, Learning Assistance Resource Center, and Health Center.

### Mentor Program

McCarthy Hall 157A (714) 773-3709

The Mentor Program seeks to improve the retention and graduation of individual students with university personnel by matching a student with a peer, a faculty member or staff member in a mentoring relationship. Mentors provide encouragement to the students with whom they work in the following ways: (1) serving as role models, (2) helping to build self-esteem, (3) supporting the student's educational and career goals, (4) providing general counsel and advice, and (5) providing feedback on the student's progress.

### Student Academic Services

Humanities 113 (714) 773-2288

An important component of the Educational Equity Programs (Student Affirmative Action and the Educational Opportunity Program) is Student Academic Services. These support services are designed to facilitate student adjustment, academic achievement and persistence at CSUF. Through individual advisement, counseling, workshops, and social activities, students are encouraged toward their educational goals. The center also provides referrals to other appropriate services and is an important liaison between each individual student and various university offices.

#### Student Affirmative Action

Library (lower level) 22 (714) 773-2086

Student Affirmative Action (SAA) is part of The California State University's systemwide Student Affirmative Action plan which was mandated by the California Legislature in 1984 under Assembly Concurrent Resolution No. 151. The intent of this resolution was to address the underrepresentation of ethnic minorities, women and economically disadvantaged students enrolled in California postsecondary institutions.

At Fullerton, the SAA program focuses on students from underrepresented groups who are academically qualified to meet the system's regular admission requirements. The program's major activities fall into two components: outreach and educational enhancement.

#### **Outreach Services**

Outreach services and activities to increase the enrollment of regularly admissible students from underrepresented groups to Cal State Fullerton is one of the responsibilities of SAA.

High School and community college students seeking admission to the university are provided information on Fullerton admissions' procedures, academic programs and student support services. Students are also provided individual advisement and assistance with application processes and information on financial aid and scholarships. Parents of prospective students are also invited to participate in outreach activities including a parent support group and information workshops to familiarize them with various segments of the university and promote their involvement in the college experience of their offspring.

The Intermediate Outreach Program works with ethnic minority students from local junior high schools in preparing them to enroll successfully and excel academically in college.

#### **Educational Enhancement**

Recognizing that students are more likely to succeed in an environment where they are treated with sensitivity and understanding, the SAA educational enhancement component works with faculty, staff and administrators to create a sensitive and supportive environment for minority and underrepresented students.

#### Student Study Center (SSC)

Library (lower level) 38 (714) 773-3488

The Student Study Center is designed to help students reach high academic achievement. It is targeted primarily for students in equity programs. Other students can participate by signing up as Fullerton College adult learners.

The SSC has three major components: strategies classes, tutoring, and computer assisted instruction.

The strategies classes incorporate techniques for learning using the content of classes the students are attending. Examples include taking and using lecture notes, organizing concepts, analyzing and synthesizing information, and managing time.

Tutoring for individuals and small groups is available for some classes and is designed to help students develop good study skills and improve grades.

CAI Lab (Computer Assisted Instruction) The lab is available to help students learn basic skills in reading, writing, mathematics, and critical thinking, as well as content background in general education classes, such as history, geography, and political science. The lab also features word processing, desktop publishing, and statistical packages.

# University Outreach/Relations with Schools

Library (lower level) 22 (714) 773-2086

The University Outreach Service Office develops and coordinates a comprehensive program of outreach services and activities to make the university more visible, attractive and accessible to all potential students. An overall goal of the office is to increase the enrollment of students at Cal State Fullerton with a special emphasis on students from underrepresented ethnic minority groups.

To accomplish this goal, outreach staff make presentations to high school and community college students, parents and counselors regarding Fullerton admissions procedures (including admission to the Educational Opportunity Program (EOP) and Student Affirmative Action (SAA), academic programs and student support services). Students are also provided individual advisement and assistance with application processes and financial aid procedures.

Special activities including campus tours, admissions workshops for parents and conferences for high school and community college counselors are also sponsored by the office.

In keeping with the university's commitment to increase the representation of ethnic minority and underrepresented students at Fullerton, special efforts are made to incorporate the unique needs of these students in the development and implementation of all outreach efforts.

#### Campus Tours

Call the University Ambassadors' Office at (714) 449-7058 for information on how to schedule campus tours as well as days and times of tours. Tours last approximately one hour, and are not available on weekends, evenings or holidays.

## Writing Center

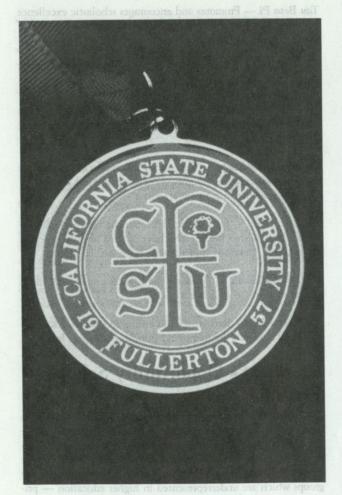
Humanities 528 (714) 773-3650

The Writing Center provides tutorial assistance primarily for students who are enrolled in English Department writing classes. However, tutors will also assist students who need help in writing papers for other university classes. Tutors offer individualized instruction, helping students write the kind of clear, concise prose necessary for academic and professional writing. While they will not proofread or edit papers, tutors do offer constructive

suggestions designed to help the student master the techniques of proofreading and editing. The goal is to increase the student's competence, not to improve any given paper.

Tutors are also trained to help non-native speakers of English improve not only their writing but their speaking skills, and students may make appointments for conversation. If a student needs intensive work on grammar, one-to-one tutoring in this skill is available and can be supplemented with study materials and computer programs. Additionally, the Center has sample topics for the EWP which students may write on and then receive tutorial feedback prior to the exam.

Student Study Center (35C) 77 (417)



subjects for the 10th, Mah and first half of the 12th

# Honors Programs

#### Dean's Honor List

Academic achievement is recognized with the publication each semester of a list of undergraduate students whose grade-point averages for the previous term are 3.5 or better for 12 units of graded course work. Students are notified in writing when they have earned this distinction.

#### General Education Honors

The General Education Honors Program offers students many of the educational benefits of a small college in the midst of the rich resources of a large university. The program's small class sizes provide challenging learning experiences, individualized attention from professors, and closer interaction with other students.

The program also gives students the opportunity to earn recognition for distinguished academic performance in general education courses. Students who successfully complete the requirements for honors in general education will have a notation placed on their transcripts.

In order to graduate with honors in general education, a student must: be accepted into the General Education Honors Program; complete 24 units of general education honors courses; maintain a grade-point average of 3.25 in all general education honors classes; complete the university's general education requirements.

For additional information, please refer to the General Education section of this catalog. The section of this catalog.

#### Honors at Entrance

Honors at entrance are awarded to both freshman and transfer students who have demonstrated outstanding achievement in past academic work. For first-time freshmen with no previous college units earned, a grade point average of 3.5 on a four-point scale must be earned in the course work considered for admission to the university. Students who have completed fewer than 56 transferable semester units of credit must meet the grade-point average criteria for first-time freshmen and must also have earned a 3.5 grade-point average on all transferable college work attempted. Students who have completed 56 or more transferable semester units are eligible if a grade-point average of 3.5 is earned in all transferable college work completed.

#### Honors at Graduation

Honors at graduation for baccalaureate recipients are based on overall performance and have been defined by the Academic Senate in three classifications:

With	honors g.p.a	1. 3.50-3.74
With	high honors g.p.a	a. 3.75-3.89
With	highest honors g.p.a	a. 3.90-4.00

#### Honor Societies

Chapters of eleven honor societies have been chartered at California State University, Fullerton to recognize students who demonstrate superior scholarship and leadership in specific academic

Alpha Kappa Delta — Promotes social research for the purpose of service and recognizes high scholastic achievement among junior, seniors and sociology graduate students.

Beta Alpha Psi — Encourages and gives recognition to scholastic and professional excellence in the field of accounting.

Beta Gamma Sigma — Encourages and rewards scholarship and accomplishment among business and administration students.

Eta Kappa Nu — Recognizes students in electrical engineering distinguished by scholarship, activities, leadership, and exemplary character, and helps these students progress by association with alumni.

Kappa Tau Alpha — Recognizes high scholarship and professional standards among students of journalism in the better schools and departments of journalism and communication in American colleges and universities.

Lambda Alpha Zeta — Encourages and stimulates superior scholarship and professionalism among students in anthropology.

Mu Phi Epsilon — Promotes high standards in education and performance in the professional world of music.

Omega Rho — Serves as a vehicle of recognition for outstanding students in the field of operations research.

Omicron Delta Epsilon — Recognizes scholastic achievement in economics. To agrava smoq-abarg a haldigita are annu

Phi Alpha Theta — Recognizes and encourages excellence in the study of history.

Pi Sigma Alpha — Recognizes and encourages productive scholarship in the subject of government among junior, senior and graduate students.

Psi Chi — Advances and maintains scholarship in the science of psychology.

Tau Beta Pi — Promotes and encourages scholastic excellence and service among the top eighth of junior and the top fifth of senior students in all engineering disciplines.

The following five societies also recognize specialized groups of people, but are not limited to a specific academic field:

Golden Key National Honor Society — Promotes and recognizes scholastic excellence and service among juniors and seniors at CSUF.

Omicron Delta Kappa — Recognizes and encourages exemplary character and superior quality in scholarship and leadership. Open to students with junior standing.

Phi Beta Delta — Honors excellence among international students, distinguishes faculty who have studied or done research abroad, and American students who have studied abroad.

Phi Delta Gamma — Promotes the highest professional ideals among students in graduate school.

Phi Kappa Phi — Recognizes and encourages superior scholarship in all academic disciplines in institutions of higher learning.

#### President's Opportunity Scholars Program

California State University, Fullerton established the President's Opportunity Scholars Program as a means of recognizing the academic and extracurricular excellence of a select group of students. Its special focus is outstanding students from the current year of high school graduates who are also members of minority groups which are underrepresented in higher education - primarily African-American and Hispanic students. Scholars receive a stipend of at least \$1,000 a year for four years while maintaining program eligibility.

To be eligible for consideration, an applicant must:

- · Be a legal resident of California.
- Have a grade-point average of at least 3.2 in all academic subjects for the 10th, 11th and first half of the 12th grades.
- · Earn a Scholastic Aptitude Test total score of 900 or higher, or an equivalent American College Test composite scores.
- Graduate from high school in the class year preceding the fall semester for which applying.

- Document significant contributions to school and community activities during the high school years.
- · Verify outstanding individual achievement.
- · File for admission to Cal State Fullerton before applying for a President's Opportunity Scholars award.
- Submit a completed President's Opportunity Scholars application form and arrange for the Secondary School Report and Description and Evaluation of Student forms to be submitted by the high school principal or a counselor and by a faculty member.

#### President's Scholars Program

California State University, Fullerton established the President's Scholars Program as a means of recognizing the academic and extracurricular excellence of a select group of students. Funded by the President's Associates, the program began in 1979 with the first 10 President's Scholars. Each year 10 additional President's Scholars are selected with the potential eligibility of all chosen individuals extending for a total of four years. President's Scholars receive a stipend of at least \$1,000 a year for four years while maintaining program eligibility.

To be eligible for consideration, an applicant must:

- · Be a legal resident of California.
- · Present a grade-point average of at least 3.75 in all academic subjects for the 10th, 11th and first half of the 12th grades.
- · Earn a Scholastic Aptitude Test or an American College Test composite score that is well above average. A minimum CSU eligibility index of 3850 is required.
- Graduate from high school.
- · Verify outstanding individual achievement.
- · Document significant contributions to school and community activities during the high school years.
- · File for admission to Cal State Fullerton before applying for a President's Scholars award.
- · Submit a completed President's Scholars application form and arrange for the Secondary School Report and Description and Evaluation of Student forms to be submitted by the high school principal or a counselor and by a faculty member.

Application forms for both Scholars Programs are available by telephoning (714) 773-2010 or by writing the President's Scholars Screening Committee, President's Scholars Program, Library 20, California State University, Fullerton, CA 92634.

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# Institutes and Centers

#### California Desert Studies Consortium

Faculty Terrace 303 (714) 773-2428

The California Desert Studies Consortium membership consists of all 20 California State University campuses but is operated by the campuses of Dominguez Hills, Fullerton (the lead campus), Long Beach, Los Angeles, Northridge, Pomona, and San Bernardino. The primary objectives of the Consortium are to provide physical and academic support for undergraduate and graduate education in a variety of disciplines and to assist in the management of the biological diversity of desert environments. The CSU Desert Studies Center, located in the East Mojave Desert at Soda Springs, provides living and laboratory facilities for 75 individuals. In addition the Consortium serves as a desert educational and research liaison for the region for both private and government agencies.

#### Center for Economic Education

Langsdorf Hall 530 (714) 773-2248

The Center for Economic Education is one of many such centers at colleges and universities in the United States working with the Joint Council on Economics Education at the national level and the California Council on Economic Education to expand economic understanding. Center programs include services to schools and colleges, individual educators, and the community; research and professional training; and operation of an economic education information center. The center is located in the School of Business Administration and Economics.

#### Center for Excellence in Science and Mathematics Education MH 434

(714) 773-2671

The Center for Excellence in Science and Mathematics Education is a joint venture of the School of Natural Science and Mathematics and the School of Human Development and Community Service. The primary functions of the center are:

- 1. Serve as a focal point and clearing house for all activities in science in math education on the campus.
- 2. Coordinate and provide support for obtaining external funds for the improvement of Science and Math Education.
- 3. Enhance outreach activities with area schools and educators.
  - 4. Publicize existing science and math education programs at
  - 5. Promote increased access to science and mathematics to all students, especially underrepresented minorities, women, and bilingual speakers.



- 6. Foster discussion and develop innovative ideas regarding current issues and methods in mathematics and science education.
- 7. Increase communication and cooperation between NSM and HDCS faculty in improving science and math education and classroom teaching.
- 8. Training/mentoring of graduate teaching assistants as part of the functions of CESME.

A steering committee consisting of faculty from NSM and HDCS oversees the center's activities.

#### Center for Governmental Studies

Education Classroom 424 (714) 773-3521

The Center for Governmental Studies supports research, training and publication which assist governmental, professional and civic groups. It is housed in the Political Science Department and draws upon departmental, community and alumni expertise. The Institute publishes monographs and books, sponsors training programs, and supports theoretical and applied research which are of interest to public policy makers. Institute funds also assist in supporting the teaching mission of the department.

#### Center for International Business

Langsdorf Hall 626 (714) 773-2223

The need for an international dimension to business education is underscored by the importance of international business operations to domestic firms and the development of multinational firms and agencies. Equally important is a growing awareness of the diversity among the world's cultures and economies, and an understanding of an unavoidable interdependence among nations. The International Business Center has undertaken to meet these challenges in the international area by developing international business programs with the School of Business Administration and Economics. John to reining troops and ivorg sall satel

## Developmental Research Center

Humanities 519 Social Science Research 773-2147 (714)

The Development Research Center in the Department of Psychology supports the research and instructional activities of faculty and students in developmental psychology. Unique opportunities are provided to students in both research training and applied developmental psychology. Programmatic research conducted at the center includes: (1) longitudinal assessment of the relationships between home environment, mental development and school readiness; (2) experimental analysis of perceptual and cognitive abilities; (3) life-span changes in memory and information processing; (4) learning disabilities in children and adults; (5) memory strategy instruction across the life-span; (6) development of cerebral hemisphere specialization; and (7) parent-child computer learning activities.

#### Foreign Language Laboratory

**Humanities 325** (714) 773-2153

The Department of Foreign Languages has a state-of-the-art 36station Tandberg IS-10 audio tape lab. Attached to the audio tape facility is a 15-station laboratory for computer-assisted language learning. Here, students in selected classes use computer programs to learn grammar, idioms, and vocabulary as well as to write compositions in foreign languages. Foreign Language video tapes and laser discs provide students with authentic and interesting supplements to classroom instruction.

### Humanities Institute robins / bas

Faculty Terrace North 612 (714) 773-3474 or (714) 449-7045

The California State University, Fullerton Humanities Institute promotes scholarship and study in the humanities disciplines and encourages investigation of pedagogical advances in the humanities. The Institute is engaged in an on-going series of projects designed to create instructional materials and programming to enhance humanities instruction at all levels of the educational system within the region served by California State University, community at large; (2) promoting active research on celling and molecular problems; (3) encouraging student research

Institute activities are planned and coordinated by an intersegmental advisory board comprised of representatives of both public and private educational institutions at the K-12, community college and university level. The Institute has published an annotated resource guide for teachers of the humanities in Orange County which includes information on a broad variety of humanities resources such as art museums, colleges and universities, consulates, historic sites, historical and cultural organizations, libraries, museums, and performing arts centers. Also included is a select annotated bibliography of other resource publications.

## Institute for Economic and Environmental Studies 1483 ETT (417)

Langsdorf Hall 702 to memorate A add not summed ad I (714) 773-2509

The Institute for Economic and Environmental Studies promotes interdisciplinary research, education and study, and dissemination of information concerning the environment. Particular emphasis is placed on the examination of environmental problems for the purpose of providing information and analyses concerning policy alternatives. The institute seeks funding to support research, sponsor conferences and seminars and prepare environmental studies and reports of interest to the academic, governmental, and general communities. Whenever possible, the institute's activities are structured to allow the participation of graduate and undergraduate students.

### Institute of Geophysics

McCarthy Hall 263 (714) 773-3882

The Institute of Geophysics is an interdisciplinary organization currently comprised of faculty members from the Departments of Geological Sciences and Physics. It was established to foster the communication of ideas and information; encourage interdisciplinary research; and improve instruction in geophysics. Membership is open to all faculty members who are interested in aspects of geophysics.

#### Institute for Molecular Biology and Nutrition

McCarthy Hall 282 (714) 773-3614

The Institute for Molecular Biology and Nutrition is an interdisciplinary organization comprised of faculty members from the Departments of Biological Science, and Chemistry and Biochemistry. The mission of the Institute is the exploration of ideas and problems concerning cell and molecular life science with special emphasis on understanding the biochemical basis of nutrition by: (1) fostering communication of scientific ideas to its membership, affiliated departments, the University, and to the community at large; (2) promoting active research on cellular and molecular problems; (3) encouraging student research in affiliation with members of the Institute; (4) development of courses related to the Institute's mission which benefit from the unique interdisciplinary approach; and (5) establishment of the Biotechnology Minor.

The Institute sponsors a series of special seminars and symposia featuring distinguished scientists of national and international renown.

## Institute for the Advancement of Teaching and Learning

McCarthy Hall 161D2 (714) 773-2841

The Institute for the Advancement of Teaching and Learning (IATL) was established to promote a preeminent learning environment at California State University, Fullerton. The IATL conducts activities which empower faculty to improve the learning which goes on in their classrooms, to increase their own learning about good teaching practices, to study issues related to learning in their own disciplines, and to conduct research related to teaching and learning in general. The IATL also advances pedagogical research projects, including those related to the effects on learning of various faculty teaching styles and student learning styles in the classroom, and the role of outcomes assessment in the learning process. The IATL is the central coordination unit for such activities on the CSU Fullerton campus.

The activities of the IATL include: seminars, workshops, colloquia, and Chautauqua-like programs; developing a library for faculty of information about teaching for learning; publishing the series "Creative Teaching" and "Creative Teaching Tips," and developing internal and external faculty enhancement and learning improvement research proposals.

#### Laboratory of Phonetic Research

Education Classroom 630D (714) 773-2526 (714) 773-2441

The Laboratory of Phonetic Research is a research and training facility in the Department of Linguistics. It is equipped with electromechanical facilities for the study of human speech, recording equipment, and an extensive collection of tape recordings of lesser known languages and dialects. Its objectives are to provide beginning students with teaching, training and experience in phonological analysis and to provide advanced students and faculty with facilities for research in phonetics and phonol-

The Laboratory also serves as the editorial home of the California Linguistic Newsletter.

#### Ruby Gerontology Center

Ruby Gerontology Center 8 (714) 449-7057

The Charles L. and Rachael E. Ruby Gerontology Center serves as a forum for intellectual activity and creative scholarship in the area of gerontology. The Center houses the activities of the Continuing Learning Experience, the Gerontology Research Institute, and is a resource center on aging for the Orange County region. The Center's goals include: promoting educational programs concerning adult development and aging, developing productive intergenerational activities in education and research, fostering cross-disciplinary research on topics related to aging and later life, providing opportunities for lifelong learning, and expanding opportunities for professional growth and development for those interested in gerontology.

#### Social Science Research Center

Humanities 512 (714) 773-2202

The Social Science Research Center supports the instructional activities and research of the faculty and students in the School of Humanities and Social Sciences. The SSRC has three broad mission areas: (1) Instructional Support, (2) Research Support, and (3) Community Service. The facility provides instructional support through courses and workshops offered in the Microcomputer Teaching Laboratory. Students and faculty have access to computer workstations in an open computer laboratory during normal university hours and on weekends. Research activities of the faculty and students are supported through consultation with

the professional and graduate assistant staff of the SSRC. The SSRC provides community service to agencies and organizations within Orange County in the areas of survey research, program evaluation and statistical analysis. The community service activities also provide instructional and research opportunities for the faculty and students.

#### Southern California Ocean Studies Institute

McCarthy Hall 282 (714) 773-3614

The Southern California Ocean Studies Institute, which consists of seven State University campuses (Dominguez Hills, Fullerton, Long Beach, Los Angeles, Northridge, Pomona, San Diego), participates in training scientists and educating the general public by coordinating and facilitating marine educational and research activities. It provides facilities for introducing students to the marine environment and for intensive participation by students pursuing professional programs. The major facility is the R/ V Yellowfin (85-foot vessel) which is used by classes and research programs in biology, geology and ocean engineering. In addition the Institute serves as an educational and research liaison.

## Sport and Movement Institute

Physical Education 134 (714) 773-3316

The purpose of the Sport and Movement Institute is to promote an atmosphere congenial to research, creative activity, and services concerned with human movement and its related phenomena. Specifically, the organization endeavors to: (1) provide services of evaluation, consultation and advisement; (2) foster and encourage the generation and communication of ideas and information; (3) interpret and facilitate the practical application of research findings; (4) provide opportunities for individuals and community groups to participate in activities of the Institute such as clinics, workshops, seminars, etc.; (5) promote and support research and other scholarly activities on the part of the member-

#### Tucker Wildlife Sanctuary

McCarthy Hall 207H (714) 649-2760 (714) 773-3451

The Tucker Wildlife Sanctuary operates as a nonprofit California State University, Fullerton Foundation agency. Located in Modjeska Canyon in the Santa Ana Mountains, the sanctuary provides for a program of continuing educational service to the community; a research center for biological field studies; a facility for teacher education in nature interpretation and conservation education; and a center for training students planning to enter into the public service field of nature interpretation.

#### Twin Studies Center

Humanities 521I (714) 773-2568

The Twin Studies Center of the Psychology Department is designed to serve two purposes: (1) conduct research projects on twins that will contribute to knowledge concerning the rearing and educating of twins, and to our understanding of human development, and (2) provide information to the public concerning psychological and biological aspects of twinship.

vices of evaluation, consideration with althought 12 ideals leads encourage the generation and communication of refusages of the mapon. (3) interpret and facilitate the practical largest structed research fleelings; (4) provide orportunities, to andividuals and communic, groups to participate in adjivities of the lightness such as clinics, workshops, sepapas, etc., (5) manors and support research and other scholarly activities to the part of the members ship.

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The public service field of the public service in nature of the public service was public to a service wo pursoned to the Psychology Department is deciving that will contribute so knowledge concerning in natural service wo pursoned to our understanding of nature development and (2) provide information to the public condensed of the public confidenced assects of twinship.

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Southern California Ocean

McCarthy Hall 282

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# Student Affairs

Classroom activity is devoted to the academic development of the learner. Student Affairs offers programs which support the academic program and simultaneously provide students with services and opportunities for personal growth. Some Student Affairs programs such as housing and financial aid emphasize their service and educationally supportive roles; others, like counseling, accentuate their developmental aspects. The opportunities offered by the university's Student Affairs program vary from the traditional social activities to lectures and concerts funded through the Associated Students. Developmental activities include the exploration of personal and vocational life styles and leadership and training.

Student Affairs are comprised of Academic Appeals, Career Development Center, Disabled Student Services, Financial Aid, Student Health and Counseling Service, Housing and Residence Life, International Education and Exchange, School Based Assistant Deans, Testing and Research, University Activities Center, University Center (Student Union), and Women's/Adult Reentry Center.

#### Vice President for Student Affairs

Langsdorf Hall 810 (714) 773-3221

The vice president's office coordinates and supervises all student affairs services and programs. The vice president is responsible for the quality of student life on the campus and works with faculty, administration and students to improve the campus environment. This office is also charged with administering the university's academic appeals procedure and the student disciplinary codes.

#### Academic Appeals

Langsdorf Hall 810 (714) 773-3836

Students who have grade disputes are encouraged to make every effort to resolve the issue informally by meeting with the instructor, department chair, and dean of the school. Students who feel they have been unsuccessful at resolving the issue informally, should contact the coordinator of academic appeals, who will work to resolve the dispute informally and provide information and clarification about university policies. Students are encouraged to contact the coordinator if they have questions about the academic appeals process.



#### Career Development & Counseling

Langsdorf Hall 208 (714) 773-3121

Career Development and Counseling provides career counseling, personal counseling and employment services. The center has designed many programs and services tailored to fit career exploration, planning and employment needs. One of the most popular services is listings of local, part-time jobs for Cal State Fullerton students.

Whether a student is just beginning to think about a major or a career or is ready to look for a job, the CDC has counselors and programs that will help define and achieve career goals. The CDC draws upon both on and off campus contacts and resources by working closely with employers and on task forces with faculty to plan career programs. In addition to career issues, some counselors are trained in personal counseling. An individual, confidential appointment can help clarify concerns and contribute to the learning experience. Make the time to get acquainted with and use the CDC's services and programs.

#### Counseling

CDC professionals can help to identify interests, skills and values and their relationship to career opportunities through counseling and vocational testing. Students who encounter emotional or personal problems may come to the CDC for professional psychological counseling.

#### Seminars and Workshops

Group sessions examine topics such as career planning, resume writing, job search techniques, interview skills and other career related subjects throughout the semester. Many of these seminars are designed for specific academic areas. In addition, workshops in personal development and life skills are offered in the center. See the CDC Calendar published every semester for current information.

#### Career Resource Library

The center has an extensive collection of company, career search, occupational and labor market information to help with career research. The library includes books, pamphlets, brochures, as well as audio and video tapes.

#### Part-Time Employment

The center has listings of part-time, summer and temporary employment which are received each day from local employers.

#### Career Employment

Employment listings and recorded job information are available to students and graduates seeking full-time career opportunities. The jobs are found in government agencies, business, industry, manufacturing and service industries.

#### On Campus Recruitment

Several hundred employers send recruiters to the CDC each fall and spring to recruit graduating seniors, graduate students and

#### **Educational Placement**

The center provides complete services for candidates seeking employment in educational institutions including: placement counseling, placement file service, position listings and a published bulletin of administrative openings.

#### Minority Services

The CDC is aware of the career needs of minority students; counselors work closely with employers, clubs and professional organizations to provide services and opportunities that will help meet these needs.

#### SIGI PLUS™

SIGI PLUS™ (pronounced "Siggy") is a computer-based System of Interactive Guidance and Information that will help make career decisions. The program will help examine values, explore career options and master decision-making strategies. It also contains Graduate School Selector, a program of information on 800 graduate schools in the nation.

#### Career Class

Career Exploration and Life Planning (Counseling 252) is a three unit course designed to facilitate career and educational decision making. Specific objectives of the class include increasing awareness of self, the world of work, relationships between college majors and occupations, and job search skills. See the current Class Schedule for further information.

#### Alumni Career Bank

The Alumni Career Bank is composed of several hundred CSUF alumni who have volunteered to share their work experiences with students. Over 100 career areas and nearly every major and program are represented in the bank.

#### Walk-In Counselor

Throughout the day a CDC counselor is available to help define career needs and suggest appropriate CDC services. This is designed to answer short questions and provide information.

Certain services of Career Development & Counseling are available without cost to currently enrolled students. Services are also available to alumni without charge for six months following graduation. After that period, alumni will be charged a nominal fee for services.

The university will furnish, upon request, information concerning the subsequent employment of graduates from programs or courses of study which have the purpose of preparing students for a particular career field. This information includes data concerning average starting salary and the percentage of previously enrolled students who obtained employment. The information provided may include data collected from either graduates of the campus or graduates of all campuses in The California State University system. Copies of the published information are available in the center.

#### Financial Aid

McCarthy Hall 63 (714) 773-3125

The Financial Aid Office is committed to providing eligible students with the necessary financial aid resources to ensure their academic success. The office provides financial assistance to approximately 6,300 students annually and administers over \$17 million each year through the following student financial assistance programs:

Supplemental Loans for Students (SLS) Parent Loan (PLUS) Program Perkins Loan (formerly NDSL) Stafford Loan (formerly GSL) Pell Grant Supplemental Educational Opportunity Grant Bureau of Indian Affairs Grant State University Grant Program Educational Opportunity Program Grant College Work Study Program Cal Grant A (State Scholarship) Cal Grant B (College Opportunity Grant) to bus protections bas house Graduate Fellowship Private Scholarship Emergency Loan Fund

For further information concerning financial aid programs available at the university see the Registration Procedures section of this catalog or call the Financial Aid Office.

#### Disabled Student Services

Library 113 (714) 773-3117

Disabled Student Services provides assistance and offers special services to all disabled students. The purpose of this program is to make all of the university's educational, cultural, social and physical facilities and programs available to students with orthopedic, perceptual and/or learning disabilities. The program serves as a centralized source of information and provides students with individual attention. The professional and support staff are experienced with the particular needs of persons with disabilities.

The program works in close cooperation with other university departments in order to provide a full range of services. These services include classroom support services (readers, notetakers, tutors, interpreters for the deaf/hearing impaired, alternative testing) counseling, handicapped parking, application assistance and priority registration, academic advisement, career counseling and job-placement, housing and transportation, health services for acute illness and advocacy.

The program coordinates and provides diagnostic assessment, counseling, advisement, advocacy and supportive services for students with learning disabilities.

The program needs and encourages involvement and input from the students it serves in order to maintain a responsive and quality program.

Information regarding special facilities and services available to disabled students may be obtained from the Office of Disabled Student Services.

#### Health Service

Student Health Center (714) 773-2800

The Health Service is staffed by physicians, nurse practitioners, registered nurses, laboratory and radiology technologists, a pharmacist, and a physical therapist. Most of the providers are primary care clinicians. The staff also includes specialists in the following fields: gynecology, orthopedics, allergology, podiatry, health education, reproductive health, and nutrition counseling.

All medical records are confidential; no information will be released without the patient's written permission, except in the rare case of a court subpoena.

The cost of care provided by the Health Service, except for a few specific fees, has been paid through student fees and by the State of California. Every registered student is eligible for care. A voluntary augmented fee program (Titan Health Card) has been added to help reduce the cost of student health care. The Student Health Service cannot, however, meet all medical needs. Students are urged to obtain health insurance, if they do not already have adequate private insurance. A policy is offered on campus through the Associated Students, Inc.

#### Housing Services and Residence Life

Cypress House 101 (714) 773-2168

The University welcomed its first residence students in spring, 1988. Up to 396 students are accommodated in 66 Residence Hall suites. Each 3 bedroom, 2 bath suite accommodates 6 residents, is air-conditioned, carpeted and fully furnished. This is the first phase of a two-phase construction program that will eventually house up to 800 students on campus.

The housing complex offers a study lounge, computer and typing rooms, a weight room, a multi-purpose room and coin-operated washers and dryers. Barbecue grills, a picnic area, a basketball court, a sand volleyball court, video game machines, billiards, ping pong, a large screen television set and VCR are also available for residents.

The Housing and Residence Life Office also assists students in their search for off-campus housing. The office provides updated listings of local apartment complexes. Bulletin boards are available for posting cards by students seeking roommates or accommodations. Other listings highlight rooms for rent in private homes and rooms in exchange for work. Additional information is available on model rental agreements and on referrals for community housing agencies handling landlord/tenant law.

Residence hall space is available for summer session students and for educationally related groups sponsoring workshops and programs on campus.

Contact the campus Housing and Residence Life Office for further information.

### International Education and Exchange

McCarthy Hall 79 (714) 773-2787

California State University, Fullerton is a community of people from many nations and cultures. The Office of International Education and Exchange is dedicated to promoting the exchange of knowledge and experience within the multicultural campus community and with the world at large. The office provides information and assistance for all international students attending CSUF and for U.S. students planning to study abroad.

#### International Students

Over 1000 students from nearly 70 countries study at CSUF as international students, and the staff of the Office of International Education and Exchange endeavors to provide them with a home away from home. The office provides visa eligibility documents, pre-arrival information, and orientation to newly admitted students. The door is always open for students to meet with an adviser to discuss academic concerns, cultural adjustment, immigration matters or just to chat.

Campus activities such as international dinners and discussions occur throughout the year. The office coordinates programs in the community, such as the Fullerton International Friendship Council.

### Study, Work and Travel Abroad

Ayear or semester overseas can provide an invaluable educational experience. Cultural awareness, language skills and an in-depth knowledge of one's field from an international perspective are but a few of the many benefits of studying abroad. A well planned program offers career advantages with the increasingly multinational and multicultural organizations and communities of southern California.

The California State University International Programs is an academic year program with 25 centers in 15 countries. International Programs participants remain enrolled at CSUF, earn residential credit, and pay only home campus fees. All personal expenses are the student's responsibility.

CSUF has established campus-based direct exchange programs with universities in the Soviet Union, China, France, Japan and Mexico. Application and admission requirements vary somewhat by country. No overseas tuition is charged; students pay regular CSUF campus fees, plus international transportation, living, and related expenses. Semester programs are available. Detailed information may be found in the "International Programs" section of this catalog. and man the shands been amusore gordent of

Information on the International Programs as well as a general library on study, work, and travel abroad are available in the International Education Office.

#### Intercultural Development Center

The Intercultural Development Center, located in the Library, Room 4-B, offers educational support programs and services for foreign-born students, particularly recent immigrants and refugees. Students will be offered programs such as employment skills workshops, peer support groups, traditional cultural celebrations, and English Writing Proficiency Exam preparation sessions.

The Intercultural Development Center builds cross-cultural awareness in the campus community by serving as a resource center with published materials and presentations on diverse cultures. The Center is well-equipped to assist Vietnamese students with academic and personal problems.

#### School Based Student Affairs

The assistant deans work in collaboration with the Vice President for Student Affairs and the deans in each school and the director of the Mission Viejo Campus, to deliver services which support student progress toward degree and professional objectives. In addition, the assistant deans design and coordinate programs with faculty, students and administration which enrich the academic environment and enhance student development within the schools. (10M) nonsature of priviley of semential M

Responsibilities of the assistant deans may include counseling students with personal and academic questions, coordinating orientation and retention programs, advising student groups, administering scholarship programs, and developing alumni and community support for the school.

#### Testing and Research

Langsdorf Hall 206 (714) 773-3838

The Testing Center provides a variety of testing and research services to the university.

The center supports the counseling services available through the Career Development Center and the Student Health and Counseling Service by administering a variety of psychological tests designed to help students gain a better understanding of themselves and of their goals and interests. These tests are administered on an individual basis in response to counselor refer-

The center conducts ongoing research and evaluation of university testing programs and consults with members of the university community regarding the design and conduct of testing-related studies and survey research. The center also designs and conducts surveys of student needs, attitudes, and other characteristics.

National group testing programs related to undergraduate and graduate school admissions and teacher certification are also coordinated by the center. Information on the following tests is available in the center:

American College Test (ACT) Scholastic Aptitude Test (SAT) Graduate Record Examination (GRE) Graduate Management Admission Test (GMAT) Law School Admission Test (LSAT) Medical College Admission Test (MCAT) National Teacher Examination (NTE) California Basic Educational Skills Test (CBEST) Test of English as a Foreign Language (TOEFL)

The center also administers other group tests related to CSUF degree requirements. Information on these tests is available in the center:

English Placement Test (EPT) Entry Level Mathematics (ELM) English Equivalency Examination (EEE) Examination in Writing Proficiency (EWP) Accounting Qualifying Exam (AQE) Mathematics Qualifying Examination (MQE)

#### Women's/Adult Reentry Center

McCarthy Hall 33 (714) 773-3928

The Women's Center's primary focus is to foster a greater awareness of women's issues. Its goal is to promote gender equity through improved communication between women and men. It is open to all interested students. The center's hours are from 8 a.m. to 5 p.m. Monday through Friday. Evening appointments are always available.

The Women's Center is a place for all students — women and men — a place to get help with any problem you may have — a place to study, relax and make new friends. In short, an excellent center for students to receive support, information and resources to help them explore the many options available to them.

Programs and services include individual counseling, speakers, films, skill-building workshops, developmental groups, resource information and referrals.

The Women's Center is closely involved with the minor in Women's Studies. The center houses a Women's Studies Library of over 800 books and files with excellent research materials. A listing of film and tape titles round out the collection. The center also gathers and maintains information on local women's events, news and networks.

The Adult Reentry Center (ARC) serves adults who, after a break in their education, are considering beginning or continuing their college education. The center provides support and guidance for currently enrolled reentry students and others whose needs differ from those of the traditional university student.

ARC offers a variety of programs which include support counseling, workshops, support groups and referrals to staff and faculty. The center's counselors and programs can help students and prospective students to clarify their goals and determine if a university education is the appropriate method for attaining those goals. The center also provides information and assistance with university application and registration procedures as well as personal, academic and career counseling. Special programs, groups, workshops, films and discussions which focus on the special needs of reentry students are presented each semester. Evening hours are always available. Education and Exchange entleaving its provide their with a high

away from home. The office provides visa eligibility to sument



# Student Activities

The division of Student Affairs provides students with opportunities to teach and to learn and are not limited to the classroom at California State University, Fullerton. Students taking full advantage of the many educational opportunities at the university find themselves attending lectures, concerts and seminars offered as part of a well-developed co-curriculum on campus. Students not only attend events, but they participate in the planning and implementation of a full slate of activities held throughout the year. Through their participation, students experiment with new interests and broaden their experience with existing interests. Many clubs and organizations exist in the academic disciplines which encourage close contact between students and faculty.

#### University Activities Center

University Center 243 (714) 773-3211

From New Student Orientation through commencement the University Activities serves as a resource for students seeking to develop their management, leadership and organizational skills. New Student Orientation is coordinated by the center and held each June prior to the end of early registration. Since orientation is staffed by students, this program is an excellent way for new students to take advantage of training resources and become involved with the university.

Opportunities for involvement in the center's programs are open to all students according to their interests, abilities and time. Staff members at the Activities Center advise many student organizations and are available as resources in the formation of new groups and strengthening existing groups. Workshops on team building, organizational behavior, leadership styles, group dynamics and event programming are available by contacting the Committee members are student volutioned and an endinger

#### Leadership Opportunities

Workshops and training programs are available to teach and encourage students who may want to learn or refine leadership skills. Practical application of these skills is available through the approximately 200 campus clubs and organizations. Academic and professional organizations are either closely affiliated with academic areas at Cal State Fullerton or have national professional recognition. These groups offer students a chance to identify with faculty and community members who have similar career interests.

Councils and task forces are formed by representatives of other officially recognized organizations. These groups often have a specific purpose or are formed to solve a particular problem.

Cultural organizations seek to present ethnic, minority and cultural programs for the Cal State Fullerton campus. Many opportunities are created for the development of leadership and programming skills in this area because of the diversity of the cultures represented on campus.

Greek letter fraternities and sororities with national affiliation also exist at Cal State Fullerton. With a choice from thirteen fraternities and eight sororities, Cal State Fullerton students can usually find a group with which they want to affiliate. Rush information is available at the University Activities Center.

Many religious organizations have been formed at Cal State Fullerton with representation from a wide variety of religious persuasions. Groups which are predominantly political in nature and those whose goal is service to others also enjoy student support.

Club sports, recreation and leisure groups in a variety of recreational programs are very active on campus. Some are competitive as teams and others offer students a chance to develop individual skills which can be used as lifetime leisure activities.

#### AS Productions University Center 267 (714) 773-3501

Entertainment possibilities are endless with Associated Students Productions at CSUF. ASP consists of six committees composed of student volunteers whose common interest is to keep the campus alive with quality entertainment and educational presentations.

Any student can apply to be a program director or assistant director. Candidates for these posts are appointed by the ASI president and are approved by the board of directors. Their responsibilities include planning and implementing programs, managing budgets, and training committee members.

Committee members are student volunteers who attend regular meetings, help in program selection and work at the actual events. Joining a committee is a great way to have fun while learning leadership, communication and organization skills, as well as making a lot of new friends.

Students can join an AS Productions committee anytime during the year by contacting the ASP office.

AS Productions coordinates the film series, lecture series and concert series committees. The film series presents a variety of contemporary, classic and foreign movies to students at a cost lower than that charged by most commercial theaters. The speaker series provides the campus with prominent speakers who create a forum for issues and topics that are of importance to the campus and to the community. Noontime and major concerts provide a showcase of original music ranging from classical to rock. Major concerts are usually held indoors while all noontime concerts are performed at the Becker Amphitheatre.

Pub entertainment features bands from local nightclubs in the afternoon as well as evening concerts in the University Center

Special Events offers unique and memorable events such as fairs, theatre groups and other special entertainment.

#### Association for Intercultural Awareness

The Association for Intercultural Awareness is composed of the student cultural clubs and organizations at CSUF. It provides funds to student groups that represent ethnic programs and for educational programs that have cultural bases. For more information about the AICA contact the University Activities Center.

#### Camp Titan

University Center 259 (714) 773-3036

Camp Titan is a service opportunity for students who enjoy the special feeling that comes from sharing their time with children.

CSUF students devote one week of their time each June to be friends and counselors to over 120 children attending Camp Titan, which is accredited by the American Camp Association.

The children range in age from 5 to 13 years and are selected on a referral basis from community service agencies. Because all of the children are underprivileged, they attend camp at no cost to their

Students enjoy a special time of helping these children develop positive attitudes about themselves. The week is as much fun for the counselors as it is for the children.

Students who are interested in a week of hiking, crafts, sitting around a campfire, swimming and spending time with children, can obtain further information about Camp Titan from the University Activities Center.

#### Departmental Association Council

The Departmental Association Council (DAC) is the organization formed by the Associated Students to represent the academic associations at CSUF. DAC is composed of student delegates who represent all of the academic student organizations within each department. By being a member of his or her own departmental student organization the student is a part of the DAC.

The DAC provides funding for programs originated by member organizations. Student departmental organizations can use DAC funds to provide speakers, films and presentations that enhance the classroom experience.

Individual students can receive funds for use in conducting research. All CSUF students are eligible to apply for such funds.

The DAC provides a forum for discussion of student ideas and concerns. All students are welcome to attend council meetings.

For more information on how to get involved in the DAC, contact the University Activities Center.

#### Associated Students

University Center 207 (714) 773-3295

The Associated Students, Inc. is a campus involvement connection at California State University, Fullerton. ASI offers a variety of learning experiences through its government, programs and services. Many campus special events are the product of student efforts to bring students new educational opportunities, to teach them about the campus, and to provide them a friendly, social atmosphere at CSUF.

ASI is a non-profit corporation supported by the activity fee students pay through registration each semester. By paying this fee, students are automatically a member of the Associated Students, Inc. The purpose of the corporation is to provide academic and co-curricular programs and services for students. When students are involved in ASI they are a part of an energetic, productive group, learning valuable organization and communication skills that can augment their personal and professional growth.

#### ASI Government

The ASI government controls the actions of the corporation; it is a powerful, active organization that has use for students' talents and skills. To apply for a position or find out more about student government, visit the ASI government office in the University Center.

#### ASI President and Vice President

The ASI president and vice president are chosen through student elections each spring and manage the corporation and its employees and volunteers. These officers represent students' needs and interests to CSUF's faculty and administration and to the surrounding community. They also participate in several committees. Along with the executive staff, the president and vice president submit recommendations to the ASI Board of Directors on the corporation's annual budget of more than \$4.1 million.

#### **ASI Executive Staff**

The executive staff works with the president and vice president to direct the programs and operation of the corporation. All executive staff members are appointed by the ASI president. Students may apply for these positions in the ASI government office.

The ASI vice president for finance coordinates the budget process. The vice president for administration recruits students for presidential appointments and implements special projects. The director of legislative affairs is the CSUF representative to the

California State Student Association. This statewide organization influences decisions about education, fee schedules and related topics. The public relations director is responsible for marketing the corporation and communicating with the campus community. Student volunteers are assigned specific duties according to the needs of the corporation.

#### ASI Board of Directors

The ASI Board of Directors is composed of three directors from each school who are elected to serve one-year terms. The ASI president, vice president, vice president for finance and administrator, one faculty council representative and one appointee of the university president also sit on the board. Directors also sit on various board subcommittees and other university committees.

These directors represent the student body and work with the executive staff to implement programs that fulfill students' academic and co-curricular needs. They deal with issues regarding the business and affairs of the corporation, including approving budgets and appointments, authorizing business contracts, and issuing policy statements for administrative purposes.

The weekly meetings of the ASI board are held in the Legislative Chambers in the University Center. All students are welcome to attend. Board seats are open to all students. Election applications are available at the midpoint of each semester in the ASI government office in University Center.

#### **ASI Judicial Commission**

The ASI judicial commission decides cases for the Associated Students, Inc. The five justices, who serve staggered two-year terms, make decisions according to the ASI bylaws. Any student can bring a case to the ASI judicial commission.

#### Child Care Center Company and State of the Control Buildings 200 and 400 (714) 773-2961

The Child Care Center is sponsored and funded by Associated Students, Inc. For a nominal fee, children aged 3 months through 5 years whose parents are CSUF students, staff or faculty can benefit from the services of the center. Trained preschool teachers offer a comprehensive curriculum which covers learning skills in several areas of education.

#### Legal Information and Referral Annex Office on Campus, University Center 255

(714) 773-5757 or (714) 870-5757

The Associated Students contracts with the College Legal Clinic, a Fullerton-based corporation, to provide information on legal procedures and initial consultation on all types of legal matters. If desired, students are referred to Orange County attorneys for reduced fee services. A 24-hour hot line is maintained by the College Legal Clinic.

#### **University Center**

The University Center is located on the northwest corner of campus and provides areas for club and organizational meetings, recreation, relaxation and study. Each semester a portion of student fees helps support the services available there.

#### University Center Governing Board

The University Center Governing Board establishes operating policies for the University Center. Board members include students, faculty, an alumni representative, administrative representatives and an appointee of the university president. Additionally, the board also evaluates the programs and services of the University Center as well as space allocation and budgetary matters.

Board members are involved in several committees. Among them are the Food Services Committee, Policy Committee, Interior Design Committee, Space Allocation Committee, Art Acquisition Committee, and the Future Directions Committee. Any student may apply for a board position.

#### Main Information Desk

The information and service desk of the University Center has the answer to most questions. It's the place to purchase OCTD bus passes and ticket books; tickets for some campus events and local movie theaters; receive vending machine refunds; retrieve lost belongings from "lost and found"; and obtain general campus information. In addition, student clubs or organizations can place announcements of coming events on the building's three video screens by filling out the appropriate request form. The nearby rideshare board contains the names and phone numbers of people seeking carpool companions for long-distance trips.

The reservation office provides meeting/event facilities and related services in the UC for student groups, faculty/staff groups, and for the surrounding community. While specific room rental rates vary, some facilities are frequently available at no charge to CSUF chartered student organizations.

#### Amphitheatre

The Becker Amphitheatre was built by the Associated Students, Inc. in conjunction with the University Center. The amphitheatre, located just southeast of the University Center, is used for noontime concerts, theatre productions and other live entertainment.

#### Center Gallery

The Center Gallery offers displays of student, graduate and faculty artwork. Exhibits usually feature the work of a single artist and are shown for three weeks. All exhibits are chosen by a student art gallery coordinator.

#### Graphic Services and Photo Lab

University Center Graphic Services develops quality flyers, brochures, logos, letterheads and posters. Services include illustration, layout design, paste up, and desk top publishing. This area also offers a complete black and white photo lab. All services are provided at very reasonable prices.

#### Music Listening Room

The Music Listening Room has a living room atmosphere, with soft chairs, bright lights for reading, and a counter full of magazines. The Music Listening Room has a wide selection of the latest releases of rock, jazz, classical and country-western music. Headsets are available for personal listening.

#### Round Table Pizza Pub, Food Court, Garden Cafe

The Pub's congenial atmosphere offers a place to relax selling soft drinks, beer and wine, and Roundtable Pizza. Major sporting events are shown on the Pub's big-screen television, and music is played continuously. The Pub is located on the University Center's lower level.

The Food Court is located on the main level of the University Center and features Togos Sandwiches, the Green Burrito, the Busy Bee and the Grill O'My Dreams.

The Garden Cafe is located on the lower plaza of the University Center and offers a unique cafe menu in a pleasant outdoor garden setting.

#### Student Typing and Word Processing Center

Aside from the study lounges, this is one of the most popular services offered by the University Center. Here, students can rent typewriters and personal computers to give their assignments that professional look.

#### UC Programming

UC Programming is a committee of the University Center Board, the governing body of the University Center. The committee's purpose is to develop and present social, cultural and educational programs of interest to the University community.

#### UC Recreation Area

It's mostly fun n' games on the lower level of the UC. The recreation area offers a place for diversions that include a lounge with a large screen television, a billiard room, table tennis, video and pinball games, locker rentals, small table games and the Titan Bowl. The CSUF community is invited to participate in the various bowling leagues and tournaments sponsored each semester.

#### UC Theatre

The University Center Theatre is available to clubs and organizations for meetings, conference lectures and other presentations. It can be reserved through the reservation office at the information counter.

#### Human Corps Community Service Program

Historically, the mission of American colleges and universities has included a strong commitment to community service. California State University, Fullerton, as a publicly-supported university, places a high priority on service to the community. A primary goal of the total educational process is to prepare students for responsible citizenship. The University has encouraged, since its founding, an ethic of community involvement and participation on the part of its faculty, staff, and student body. Student clubs and organizations have carried out many social service projects, faculty have contributed their expertise to the solution of various civic problems, and individual students, staff, and faculty have all volunteered their time, effort, and abilities to fraternal, civic, and religious organizations and activities.

Therefore, the university welcomes the establishment of the Human Corps and the focus it places on service to the community. Under the Human Corps legislation, all students in publicly supported colleges and universities in California are strongly encouraged to provide an average of 30 hours of community service activity each year. Community service includes, but is not limited to: tutoring, literacy training, neighborhood improvement, job training, youth work, health-support services, mental health care, and assistance to the elderly, disabled, disadvantaged, and homeless. To support students in achieving this goal, Cal State Fullerton:

- 1. established a volunteer bureau and other systems of referral
- 2. provides support to student organizations seeking service projects, and
- 3. rewards and recognizes service contributions by individual students and student organizations.

Academic credit for certain class-related service activities is already provided in some cases and departments are encouraged to expand such opportunities where academically appropriate. Pay may also be accepted for certain service activities, such as paid internships or stipends and work-study employment.

Further information can be obtained from the University Acitivities Center, Room 243, University Center.

#### University Recreation Program

Believing that recreation and leisure pursuits are an integral part of one's total educational experience and achievement, the Office of University Recreation strives to provide all students an opportunity to use their leisure time wisely in order to attain the highest degree of physical reward and mental relaxation.

The benefits of the recreation program are numerous, and it has been proven time and again, that those who maintain good health and physical fitness, perform better in all aspects of life. These programs are free to all students.

#### Informal Leisure Recreation

An intensive program of unstructured recreational activities are available to all CSUF students. By presenting a validated, photo ID card, students can participate in the supervised use of numerous facilities including the racquetball and tennis courts, swimming complex, gymnasium and weightroom. These facilities are open seven days a week.

#### **Intramural Sports**

The Intramural Sports Program is a student funded recreational based program of competitive leagues and tournaments. The program is accessible to all CSUF students, faculty and staff. Students have an active participative voice in all operations of the program through student assistants as well as the Intramural Representatives who sit on the Intramural Sports Council. Activities such as flag football, ultimate frisbee, bowling, ping pong, basketball, softball and volleyball are scheduled at various times and days to accommodate individual schedules.

#### Sports Club

The Sports Club program at California State Fullerton is designed for individuals and organizations with similar athletic and/ or recreational interests who wish to compete against other teams outside the University. They meet on a regular basis to teach and develop skill, and to promote the sport or activity. While competing in leagues and tournaments with other colleges, universities, and local clubs they are representatives of California State University, Fullerton. All competitions are on a non-varsity (Non-NCAA) level. Typical clubs include rugby, archery, cycling, bowling, skiing and badminton.

#### Student Family Memberships

Current CSUF students who are married may purchase a recreation membership for their spouse and children (21 years and younger, living at home). Unmarried students living at home may purchase a recreation membership for their parents and siblings (21 years and younger, living at home).

# Intercollegiate Athletics

Physical Education 158 (714) 773-2677

(714) 773-2677

Director of Athletics: Bill Shumard

Associate Directors: Maryalyce Jeremiah, Larry Zucker Director of Academic Services: Christine McCarthy Director of Operations and Compliance: Mary Ann Tripodi Sports Information Director: Mel Franks health and physical filmess, perform better all appets of life

Baseball Augie Garrido

Basketball on languages between to mangora avisagem nA Brad Holland (Men) managed statements and District Men Deborah Ayres (Women)

Cross Country/Track (Men/Women) John Elders

Fencing (Men/Women) Heizaburo Okawa

Football Vacant Gymnastics
Lynn Rogers (Women)

Soccer Al Mistri

Softball Judi Garman

Tennis (Women) Bill Reynolds and opposite no various fight a social variety

Volleyball Mary Ellen Murchinson and ethic of communication and ending

Wrestling of the feature out a mornessager bak and medical Ardeshir Asgari

# Conference Memberships

National Collegiate Athletic Association bas paids demonstrated (NCAA) Division I Big West Conference

Human Corps Community S



The rise of academic prestige at California State University, Fullerton has grown alongside the development of one of the nation's impressive young athletics departments. The inter-collegiate athletics department provides student-athletes the opportunity to compete against the country's finest competition as well as providing a top-notch education. In an effort to ensure academic development, the university provides counseling systems designed specifically for student-athletes. Those services include academic advisement, guidance counseling and daily study halls.

CSUF has also made a commitment to provide facilities that enable fans and athletes alike to enjoy first-rate competition. The long-awaited Sports Complex gives Fullerton fans a much-needed home football and soccer stadium. The complex will provides a 10,000-seat stadium plus upgraded baseball facilities that will seat over 2,000. Also included are two lit softball diamonds and a lighted soccer field that enable fans to enjoy the university's many night events. Titan Gymnasium already enjoys tremendous popularity among the local community with over 4,000 fans attending home basketball (men and women's), women's gymnastics and women's volleyball events. An outdoor swimming complex, racquetball courts, weighttraining facilities, a highlevel gymnastics practice facility plus facilities for wrestling and fencing make the Fullerton athletic complex a step above.

#### Men's Intercollegiate Athletics Baseball

Few NCAA Division I baseball programs have enjoyed the degree of success that the Titans have had over the past decade and a half. During that time, the Titans won 13 conference championships, seven regional championships and two national championships. Major League stars Tim Wallach (Montreal Expos), Jeff Robinson (New York Yankees) and Mike Harkey (Chicago Cubs) have developed at Fullerton. Year in and year out, the Titans compete against the nation's finest programs and always come out winners.

#### Basketball

The development of Fullerton basketball has been one of college sports' finest Cinderella stories. Always in contention for the Big West Championship, the program has produced half a dozen professional prospects and made a pair of NITappearances. 1984 Olympic Team point guard Leon Wood is one of many fine athletes who has helped develop the Titans into a team that will continue to grow. The university's commitment to basketball ensures that success in the years to come.

#### Cross Country

Men's cross country is making positive strides. The program competes in the very competitive Big West Conference which is perennially in the spotlight for national attention. The campus and outlying community offer a beautiful setting which enable the sport to set new standards among local and national universities.

#### Football

After 18 seasons of successful Division 1-A football, the sport was suspended for budgetary reasons following the 1992 season. During its two-decade existence, Titans football gained national attention and rankings when it won back-to-back league championships and sent two dozen players to the National Football League. Plans are being formulated to reinstate the sport, perhaps as early as 1994, with a smaller budget in a new Division 1-AA conference offering minimal or need-based financial aid.

Soccer is another of Fullerton's many sports where strong coaching has turned the program into a West Coast power. Al Mistri developed one of Southern California's finest soccer programs at Damien High School in Claremont before taking over at Fullerton. Through hard work and support from a summer soccer camp, Coach Mistri has turned Titan soccer into one of the NCAA's most competitive squads. Fullerton shared the conference championship in 1986 and, with the help of the new stadium, expects to challenge for the crown every season. IT add sold AADA

#### Fencing Asia book remed grobulent ancomem A-HA seeltmoo

One of the West Coast's few Division I fencing programs gives prospective athletes a chance to train in a traditional, unique sport. The team has enjoyed a great deal of success over the past few years competing against local universities in sabre, foil and epee. Total bas shows of the version of the profite Asia

#### Track

Reinstated for the 1989 season, a spring track program provides a complement to the fall cross country schedule and should attract greater numbers of athletes. A new running track is part of the new Sports Complex and will certainly accelerate the growth of the program that was one of the mainstays of Fullerton's athletics department in the early 1970s.

#### Wrestling

Another sport that few West Coast schools support is prospering in Orange County as CSUF proves that hard work and strong coaching can bring success. Prospective athletes will find an atmosphere that is unparalleled among California universities. Top-notch competition and an All-American environment are two reasons why Fullerton wrestling is so successful. The Titans compete in the rugged Pac-10 conference.

#### Women's Intercollegiate Athletics Basketball

The rise in popularity of women's basketball has its foundations tied to the success of Fullerton women's basketball teams. Under former Coach Billie Moore, the Titans won one of the very first national championships given out in the sport and recent teams have continued to be competitive on a regional basis. Two of women's basketball's greatest names have risen from Fullerton including 1976 Olympian Nancy Dunkle and All-American Robin Holmes.

#### Fencing

One of the West Coast's few Division I fencing programs gives prospective athletes a chance to train in a traditional, unique sport. The team has enjoyed a great deal of success over the past few years competing against local universities in sabre, foil and epee. I known by sale of an analysis remote own more bus registering

#### Gymnastics State of the state o

The consistent efforts of Lynn Rogers' women's gymnastics squad have made them a top-five national power for 11 of the past 16 years. No other school in the nation has produced more All-Americans or finished in the top three for more years than the Titans. Potential scholar-athletes receive an opportunity to compete and win year-round.

#### Softball

The sport of softball continues to set new standards of excellence on the local and national level. Always a contender for the NCAA title, the Titans captured their first championship in 1986. Coach Judi Garman's teaching has brought the university countless All-Americans including former Broderick Award winners Kathy Van Wyk, Susan Lefebvre and Connie Clark. A newly finished on-campus facility now enables an even greater audience to enjoy one of the nation's most successful teams face off against other national powers. The Titans compete in the Big West with such national powers as University of the Pacific and Long Beach State.

#### Cross Country

The re-birth of a spring track schedule has been a boon to cross country as athletes in the distance races can now train on a competitive level year-round. An outstanding setting plus the addition of some outstanding athletes make success a very strong likelihood in the years to come.

#### The rise of academic prestige at California States le sinnaT

One of the university's many programs on the rise, Fullerton can take advantage of the beautiful climate of Orange County to attract the nation's top athletes to Fullerton. The redevelopment of the tennis facilities in the future make Titan tennis a program that is bound to remain competitive in the Big West. development, the university provides counseling west.

Track

Stand specifically for student-artheres. Those services

Fullerton made its strongest showing in more than a decade in the 1988 conference championship meet and optimism abounds that the Titans will become a competitive force in the Big West Conference. A new running facility and the advancements made in distance running by the cross country team combined with the climate in southern California should ensure Fullerton of a solid track program. Hadrige til over an bebolent est A. 000 S reve tiles

#### Volleyball one shears remeasure Orient Trease alors advin your

Despite playing in collegiate volleyball's most competitive conference, Titan volleyball is proving to be a program to watch. The obvious attraction comes from competing against NCAA Championship contenders who are members of the Big West, the nation's strongest volleyball conference. The acquisition of future athletes, plus the development of budding stars should create an environment that will enhance the program's success.



Oral History Programs as say occurry

## Resources

#### Anthropology Museum

The Museum of Anthropology is an educational and research resource for the University and the community. It houses, sponsors, and conducts a variety of activities as part of the CSUF Anthropology program. Exhibits of the Museum of Anthropology have included artifacts from California, the Middle East, Mesoamerica, the Southwest and Oceania. The well-equipped archaeology laboratory, faunal collection and research library provide facilities for research. Internships and classes in museum techniques are offered for students interested in museology. The museum publishes a series of Occasional Papers, administers an annual scholarship for archaeology students, houses the business office of the Society for California Archaeology, conducts studies on cultural resource management and is the clearing house for Orange County archaeology. The extensive collections are curated by a certified museologist.

#### Art Gallery

Since 1963 the Art Gallery at California State University, Fullerton has brought to the campus carefully developed art exhibitions that instruct, inspire and challenge the student to the visual arts. Exhibitions of national interest and of museum caliber are presented to the entire student body, faculty and to the community. These act not only as an educational tool but also create interaction between various departmental disciplines and between the campus and the community. In 1970 the Art Gallery was housed in its current permanent location within the Visual Arts Center. In the following years, the gallery has earned national visibility for its program in Museum Studies and Exhibition Design in which museum preprofessionals may obtain both conceptual and practical experience.

#### Dance Repertory Theatre

The Dance Repertory Theatre was formed in 1981 as a culminating experience for selected students graduating from the Department of Theatre and Dance. It offers recent graduating students in dance an opportunity to perform with a professionally oriented company, preparing them for their careers in dance. Dance Repertory Theatre also permits the university's distinguished dance faculty to continue their professional commitment through public performance. Dance Repertory Theatre members are carefully chosen, based upon their training in ballet and modern dance, to tour a repertory of established and original choreography. The company has toured extensively in southern California, the midwest and Europe.

#### Daily Titan

Cal State Fullerton's *Daily Titan* is one of the largest college newspapers in California. In recent years, it has become one of the most critically successful, as well.

The *Titan* earned first place among all college dailies in the state in 1987 and 1988 competitions sponsored by the California Intercollegiate Press Association. In 1990, the *TITAN* won CIPA's on-the-spot competition for the fourth consecutive year.

The *Titan* is published every Tuesday through Friday throughout the academic year. It is produced, written and edited entirely by Cal State Fullerton students. All its photographic content is the work of CSUF students.

The Daily Titan has a daily readership of more than 19,000. It is distributed at more than 40 locations on campus, as well as in newsracks near the University.

Work on the *Daily Titan* provides intensive experience in news-writing, copy editing, page layout and the myriad other functions necessary to produce a modern daily newspaper.

#### Dining & Vending Services

Primary food service facilities on the campus are on the University Center ground floor (the UC Food Court), and at the southeast corner of the campus, the campus Carl's Jr. In addition to these primary facilities, there is a Pub serving Round Table Pizza, beer and wine on the basement level of the University Center. Catering for the university is the responsibility of Dining Services.

Over 75 food and beverage vending machines are located at several areas on the campus to service the needs of the university. Product selection and prices are monitored by the University Food Service Committee. In addition, the vending program includes payphones across the campus and laundry machines in the residence halls.

Dining and Vending Services are operated by the California State University Fullerton Foundation.

### Fullerton Arboretum

The Fullerton Arboretum is a 26-acre botanical garden — a living museum of plants — located at the northeast corner of the campus. It contains local historical artifacts in the Heritage House museum and horticultural collections that attract visitors from the University and the surrounding communities. The Arboretum is an island of serenity in an increasingly urban/metropolitan environment.

The Arboretum offers countless opportunities to study local history and culture. Heritage House is the restored residence and medical office of Dr. George C. Clark, an Orange County pio-

neer physician. The Clark home was built in 1894 and exemplifies the Eastlake Victorian style of architecture. The house is listed in the National Register of Historic Places and the Inventory of California Historic Sites. It is also an Orange County Historic Site. It is open to the public by reservation. Trained docents discuss the period furnishings and memorabilia. Several student projects and studies have used this facility.

The Arboretum grounds contain a recirculating waterfall, pond and stream system that is a focal point for migratory waterfowl and human visitors. Many plants are grown in groups according to their moisture requirements. Others form special collections such as conifers, palms and rare fruits. Special plant displays assist visitors in their selection of plant materials for urban landscaping.

The CSUF Associated Students (AS) helped to initiate the Fullerton Arboretum by contributing \$10,000 in 1971. Since then, the AS have contributed support monies each year to hire students to help in the maintenance and operation of the Arboretum.

The Friends of the Fullerton Arboretum, the community support group, also supplies operating monies, manages the gift and garden shop, propagates plants for plant sales and provides countless hours of volunteer effort in behalf of the Arboretum.

The Fullerton Arboretum is open 8 a.m. to 4:45 p.m., seven days a week. The Arboretum is closed on Christmas, Thanksgiving and New Year's Day.

#### Herbarium

The Faye A. MacFadden Herbarium is named after Faye A. MacFadden, who sold her extensive collection of plants to the university just prior to her death in 1964. The collection now includes over 25,000 vascular plants, about 12,000 bryophytes and nearly 800 lichen specimens. The plants are used as a research and teaching tool.

#### Oral History Program

The Oral History Program offers students courses, work experience, and information about oral history. The program has conducted over 2,000 interviews on the history of Orange County, the western United States, and other areas of historical study. Either transcriptions or tapes are available for any student to use as they would use any library materials, at the Oral History Archive.

Most of these interviews were done by students in the several classes offered at the Oral History Program. The program also maintains a student staff through internships, work study or grant-supported positions. These staff receive experience in word-processing, editing, book production and organizational administration. They are credited with authorship or assistance on publications, and several alumni of the program now hold important professional positions.

#### Reading Clinic

Education Classroom 24 (714) 773-3356

The Reading Clinic serves three major purposes. First, it provides a controlled, supervised setting for the training of reading specialists and classroom teachers who wish to improve their skills in working with learning disabled and reading disabled students.

Secondly, the clinic serves as a community service providing very low cost, high quality instruction in reading that is not available elsewhere in Orange County. The clinic works closely with the Southern California College of Optometry in order to provide broader services.

The third purpose of the clinic is to provide parent education to community members whose children have reading disabilities. The clinic provides parent inservice sessions, a hot line for phone information, and a monthly newsletter of information, tips and examples of student work. The clinic is proud of its 20-year service to the university and community.

#### Speech and Hearing Clinic

The Speech and Hearing Clinic (SHC) is an integral part of the curricular programs of the university leading to a B.A. and M.A. Degree in Communicative Disorders. Since 1961 the Department of Speech Communication has provided speech, language and hearing services to the community in conjunction with its training program for professional speech pathologists. The graduate program in Communicative Disorders holds the distinction of being one of only two academic programs in California to maintain continuous accreditation by the Educational Standards Board of the American Speech-Language-Hearing Association since September 1969.

The clinic is composed of a Speech Pathology Unit, an Audiology Unit and a Communicative Disorders Research Laboratory with special emphasis given to voice disorders. The clinic offers the services of a resident professional Speech Pathologist who holds the Certificate of Clinical Competence (CCC-SP), faculty supervisors who are clinically certified and, in addition, hold doctoral degrees in the field, and student clinicians who have met strictly prescribed standards for admission to clinical practicum. Referrals to the clinic come from a variety of sources including: physicians, teachers, rehabilitative centers, private speech pathologists and audiologists, and self-referrals. Services available at the clinic include: diagnostic evaluations, therapeutic intervention, audiometric testing, rehabilitative audiology including hearing aid evaluations, screening tests for students seeking state credentials, and family counseling relative to problems associated with communicative disorders.

# Theatre and Dance Department Productions

The Department of Theatre and Dance produces six plays and two dance concerts each year on main stage along with theatre for young audiences, touring plays, master's thesis productions, playwright workshops and original one-acts. CSUF students receive rates to all Theatre and Dance Department productions. Ten of the last twelve entries in the National Kennedy Center/American College Theatre Festival have been selected for production at the regional festivals, selected each year from over 75 university entrants. In 1983, its production of *The Bulldog and the Bear* was selected from over 500 production entries to be produced at the National Kennedy Center/American College Theatre Festival at the John F. Kennedy Center in Washington, D.C.

#### Titan Shops Bookstore

The Titan Shops Bookstore is located on the ground floor of the Commons Building directly east of the University Center and west of the Library. Its primary function is to service the textbook and school supply requirements of the students of the university. In addition to these items, however, the Titan Shops carries an extensive stock of office supplies, greeting cards and clothing items, a trade book department which encompasses 12,000 reference and general interest books, a photocopy center and a gift department with an ever changing selection of items. Finally, the Titan Shops is engaged in the sale and repair of personal computers at significant price reductions to encourage the use of computers and development of computer literacy at the university.

Titan Shops is operated by the California State University Fullerton Foundation.

#### Undergraduate Reading Lab

Education Classroom 249 and 18

The Undergraduate Reading Lab/Professional Library is an essential element in the Reading Program for both graduate and undergraduate students. It serves as a resource for materials and equipment by which undergraduate students can improve their reading skills and complete additional class assignments. The lab also functions as a liaison between faculty and students, as a diagnostic lab for required or additional assessment of student skills, and as a professional resource for graduate students and faculty.

The lab has also offered services to special students from the Handicapped Center, Women's Center and the Counseling Center. In addition, the development of a professional library and the recent donation of material from the Reading Educators Guild aids graduate students in their research and course work. Finally, a goal of this lab is to develop a base of software materials for both classroom and individual student use.

#### University Channel

As part of two local cable television agreements covering the cities of Fullerton, Placentia and Anaheim, the university provides programming for dedicated channels on those systems. In January 1981, regular production of programs about Cal State Fullerton and Orange County in general was begun. Students in senior level communications and theatre courses participate in a variety of programming efforts for the university cable channel.

Theatre and Dance Department

Undergraduate Reading Lab

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# Academic Advisement

#### Academic Advisement Policy

The CSUF Academic Policy (UPS 300.002) states that:

- the responsibility for ensuring the availability of academic advisement rests with each school dean;
- every student should declare a major or school of interest as soon as possible after admission to the university; and
- all students shall confer with an academic adviser on a regular basis.

# Choosing General Education Courses and Electives

In keeping with the liberal arts tradition, the university requires its graduates to have sampled a variety of disciplines as part of their general education. The broad categories of general education courses are presented in the catalog section on "General Education."

All students are strongly encouraged to consult with major advisers or the Academic Advisement Center about choice of general education and elective courses.

#### Advisement in the Major

Students who have declared a major should consult their departmental adviser on a regular basis for academic advice.

#### Advisement for Students Who Have Not Selected a Major

Students who have not declared a major should consult one of the school advisement offices listed below or the Academic Advisement Center to discuss their academic goals.

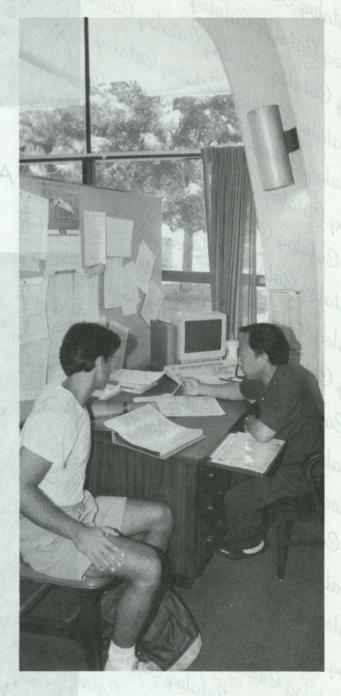
#### School Advisement Offices

Students who have declared a school of interest or who wish to explore the majors offered by a specific school should contact the appropriate school advisement office:

School of the Arts

Office of the Dean Visual Arts 199 (714) 773-3256

School of Business Administration and Economics Business Advising Center Langsdorf Hall 700 (714) 773-2211



School of Communications	Office of the Associate Dean	To help students, the University has available a number of useful resources: New Student Orientation conducted in June and No-
	Education Classroom 46	vember; summary sheets on majors available from department
	(714) 773-3355	offices or the Academic Advisement Center; a variety of counsel- ing and testing services provided by the Career Development
School of Engineering	Office of the	Center; and brochures and manuals from school and department
and Computer Science	Associate Dean	offices describing their programs of study and later work opportu-
	Engineering 100-D	nities. There are student organizations with disciplinary and pro-
ish. American history, economic	(714) 773-3362	fessional interests and a Career Development Center which has
School of Human	Office of the	information on vocations and work opportunities to help in the selection of a major.
Development And	Associate Dean	selection of a major.
Community Service	Education Classroom 325	The task of selecting a major (and often a minor or other comple-
	(714) 773-3311	mentary specialization) becomes one of crystallizing ideas on the
School of Humanities and	Office of Student	basis of experiences in specific courses, discussions with other
Social Sciences	Academic Affairs	students, faculty, the staff of the Academic Advisement Center,
	McCarthy Hall 103	etc. The option to take a limited number of courses on a Cre-
	(714) 773-2024	dit/No Credit basis often will help students explore new interests.

School of Natural Office of Science and Mathematics Academic Affairs McCarthy Hall 166 solvon and odla some (714) 773-2638

#### Academic Advisement Center Humanities 112 (714) 773-3606

The Academic Advisement Center provides guidance in the selection of elective and general education courses. It is the administrative center for undeclared undergraduate majors. All problems encountered by the undeclared major, which normally require the assistance of a department chair, are handled by the director of the Academic Advisement Center.

No appointment is necessary to engage the assistance of an adviser about various aspects of academic life at the university. For more specific information about the office, the student should consult the class schedule.

#### **Undeclared Majors**

Lower division students who are uncertain about their primary educational or vocational goals may enroll as undeclared majors. However, they should select the School which most closely reflects their general interests and consult that School's advisement office for academic assistance. During their freshman and sophomore years, such students should explore their interests and potential by enrolling in a set of courses recommended by the School adviser.

#### Choosing an Undergraduate Major

Every student should choose a major by the beginning of the junior year so that he or she may complete major requirements in an orderly way.

Students must plan freshman or sophomore programs which will permit them to enter or take advanced courses in fields they may want to pursue. They should be sure to begin or complete requirements such as mathematics, chemistry or a foreign language early in their academic careers. Students anticipating graduate or professional study should exercise special care in planning undergraduate programs and seek faculty counseling in the field of interest. Advance examination of the possibilities of graduate or professional study will be helpful to students who have clear educational and vocational objectives.

Those whose goals and objectives have not yet crystallized will have opportunities to take courses in various fields and make up their minds during their lower division work. They should, however, take full advantage of the opportunities that exist on and outside the campus to learn more about available fields of study and occupational fields.

#### Planning a Major Program

When students have selected a major field, they should study all the requirements which are specified in this catalog under their chosen degree program. They should make a tentative semester by semester plan for completing the requirements including prerequisites and discuss this plan with an adviser in the major.

In addition to courses in the major department, related courses in other fields and supporting courses in basic skills may also be required. These should be included in the tentative semester by semester plan.

Some departments require placement tests prior to admission to classes. The times and places for such tests are given in the class schedule. Students should purchase a copy of the class schedule at the Titan Bookstore when registration for classes begins.

#### Change of Major, Degree or Credential Objective

To change a major, degree, or credential objective, obtain the required form in the Office of Admissions and Records and take it to the appropriate office(s) for signature(s). Such a change is not official until the form has been signed and filed in the Registrar's Office.

#### Departmental Academic Advisement

Each department follows the advisement system which it finds the most appropriate for its majors.

It is the responsibility of the student to obtain the assistance of an academic adviser.

The adviser is a resource person who can provide information and suggestions and who can assist the student to find the most desirable ways to meet the requirements for graduation and for the major or credential. The final choice of courses and the responsibility for the program lies with the student. Undergraduate students who have not yet decided upon a major (undeclared majors) or who are not seeking a degree will be advised in the Academic Advisement Center.

Academic program advisers are able to offer better advice if students provide lists of courses they have taken and their own copies of transcripts from colleges previously attended (if students are new to Cal State Fullerton).

Graduate students will be assigned a major adviser in their fields of specialization, except in education where all will have a professional adviser from the School of Human Development and Community Service. Those students seeking a credential for teaching in secondary schools will be assigned both a professional and a major adviser.

### Preprofessional Programs

The academic programs of the university provide appropriate preparation for graduate work in a variety of fields. Students who have made tentative decisions about institutions at which they may wish to pursue graduate work should consult the catalogs of those graduate schools as they plan their undergraduate programs. Students planning to undertake graduate work should supplement their undergraduate programs by anticipating requirements at major graduate schools.

The university offers a number of professional programs through the master's degree. These include programs in the fine arts, business administration, communications, education, engineering, health education and physical education and recreation, public administration, and speech pathology-audiology. Students interested in preparing for professional careers in these areas, either here or at other educational institutions, are encouraged to seek assistance and guidance from CSUF faculty members in these fields.

#### Prelegal Preparation

It is recommended that prospective law students prepare themselves in such fields as English, American history, economics, political science (particularly the history and development of English and American political institutions) and such undergraduate courses as judicial process, administrative law, constitutional law and international law, philosophy (particularly ethics and logic), business administration, anthropology, psychology and sociology.

A distribution of course sequences among the social sciences, the natural sciences and the humanities is desirable. Students with interest in becoming lawyers should contact the Prelaw Adviser. Some faculty members in the School of Business Administration and Economics and Departments of American Studies, History and Political Science, also can provide advice and assistance.

#### Pretheological

Students who might be interested in pursuing careers in the ministry, the teaching of religion, and associated fields should take some courses in religion, psychology, anthropology, sociology, philosophy, education, communications, history, English, speech communication and a foreign language. Students desiring assistance and counseling regarding advanced work in religious studies or professional careers in the ministry or rabbinate may seek help from the faculty in the Department of Religious Studies.

#### Social Welfare

Students who plan to seek employment in social work or social welfare should prepare themselves in the fields of human services, psychology (particularly child and adolescent psychology), sociology, anthropology, political science, economics and research methods in social science.

Students who intend to enter a professional school following undergraduate training should learn about the specific prerequisites for admission to the graduate school of their choice. Ordinarily a major in one of the social sciences, and some additional work in at least several other social sciences, are recommended. Students with interests in pursuing careers in the fields of social welfare should contact the Department of Sociology or the Human Services Program for advice and assistance.

#### Health Professions

Langsdorf Hall 203 (714) 773-3980

All health professions programs are seeking the best qualified applicants with a good command of communication skills, rigorous basic science preparation, and as broad a general education base as possible.

The Health Professions Office assists students in preparing the best academic programs consistent with their former educational experience, interests and professional objectives. We continue to be concerned about the under-representation of minority students entering the health care professions. Thus, minority students are actively recruited, and every effort is made to assist them in achieving their goals.

#### Student Responsibility

All new students, both first-time freshmen and transfer students, interested in preparing to enter one of the following health professions, should register with the secretary of the committee, in the Health Professions Office: medicine, osteopathic medicine, podiatric medicine, veterinary medicine, chiropractic, clinical pharmacy, pharmacology, dentistry, and optometry.

Related health professions include anatomist, dental hygienist, histologist, medical technologist, nutritionist, occupational therapist, orthotist-prosthetist, pharmacologist, physical therapist, physiologist, public health and physician's assistant.

#### Health Professions Committee

The committee assists the student to (a) gain a clinical experience with a practicing professional in the area appropriate to the field of interest; (b) select a list of professional schools to which there is a likelihood of admission; (c) prepare professional school applications; and (d) prepare for an admissions interview.

Students who receive a favorable Health Professions Committee review of their academic records and personal qualifications. including commitment and motivation, have a committee letter prepared for them in support of their application.

# Answers To Your Questions

TOPIC	WHERE TO GO	LOCATION SO SHE RELEGISTED	TELEPHONE
Academic Appeals	Academic Appeals Office	Langsdorf Hall-810	1773-3221 water
Add or Drop a Class	See Class Schedule	ration, and subband areaning a	773-2300
Address Change	Admissions & Records Counter	Landgsdorf Hall-Lobby	773-2300
Admissions/Applications Advisement:	Admissions & Records Counter	Langsdorf Hall-Lobby	773-2300
Undeclared Major Declared Majors	Academic Advisement Center Major Department	Humanities-112	773-3606
Athletics Tickets/Passport	Athletic Ticket Office	Physical Education-122	773-2783
Child Care proplet and all lancises of	Child Care Center	Temporary-200	773-2961
Counseling:	Counseling Service-Health Center	Health Center	773-2800
Personal Vocational	Career Development Center	Langsdorf Hall-208	773-3121 28 218 2102
Degree Application/Diploma Orders	Graduation Unit		9773-2300 des m men
Degree Evaluation, Undergraduate	Graduation Unit -	Langsdorf Hall-110B	773-2300
Disabled Student Services	Office of Disabled Student Services	Library-113	773-3117
Disqualification/Reinstatement	Admissions Counselor	Langsdorf Hall-107	773-2370
Emergency Messages	Vice President for Student Services	Langsdorf Hall-810	773-3221
Employment:			
Business, Industry,	Career Development Center	Langsdorf Hall-208	773-3121
Government	S let Elignifich and let. Birthian	DOMESTIC STREET, STREE	AND THE PERSON NAMED OF PERSONS
Educational	Career Development Center	Langsdorf Hall-208	773-3121
Minority Relations	Career Development Center	Langsdorf Hall-208	773-3121
Student (Part-Time)	Career Development Center	Langsdorf Hall-208	773-3121
Staff	Personnel Services	Temporary-14	773-3121
Enrollment Verification:			
Duplicate I.D. Card or Fee Receipt	Cashier	Langsdorf Hall-108	773-3918
Letter Request	Admissions & Records Counter	Langsdorf Hall-Lobby	773-2300
Extension Class Information	Extended Education Office	Temporary-14	773-2611
Evaluations/General Education	Evaluations Unit	Langsdorf Hall-110B	773-2300
Financial Aid	Financial Aid Office	McCarthy Hall-63	773-3125
Foreign Student:	W : D		
Advisement	Major Department	McCarthy Hall-79	773-2787
Permits to Register	International Education Office	McCarthy Hall-129	773-2618
Graduate Studies	Graduate Studies Office	Langsdorf Hall-110B	773-2300
Graduation Requirements (undergraduate)	Graduation Unit University Center	U.C. Lobby	773-2468
Health Insurance	Housing Office	Cypress-101	773-2168
Housing and Transportation	Internship Office	Langsdorf Hall-210	773-2171
Internships and Cooperative Ed.	Library Building	Library Lobby	773-2724
Library Information	Engineering Building	Engineering-100	773-3709
Mentor Program	Admissions & Records Counter	Langsdorf Hall-Lobby	773-2300
Name Change Organizations & Clubs	University Activities Center	U.C. 2-43	773-3211
Organizations & Clubs	University Center		
Outreach Services	University Outreach Office	Library-22	773-2086
Parking:			772 2010
Fees wie tentative decisions about in	Cashier	Langsdorf Hall-108	773-3918
Information	Department of Public Safety	Temporary-1200	773-2903
Handicapped schools as they plan to	Disabled Student Services	Library-113	773-3117
Readmission	Admissions & Records Counter	Langsdorf Hall-Lobby	773-2300 773-2300
Records (Student)	Records Office	Langsdorf Hall-110A	773-3918
Registration Fees	Cashier	Langsdorf Hall-108	773-2300
Residency	Evaluations Unit	Langsdorf Hall-105	773-3125
Scholarships	Financial Aid Office	McCarthy Hall-63 Humanities-113	773-2288
Student Academic Services (EOP/SAA/Retention)	Student Academic Services Office		
Summer Sessions, Information	Extended Education Office	Temporary-14	773-2611
Test Information	Testing Center	Langsdorf Hall-206	773-3838
Transcripts	Admissions & Records Counter	Langsdorf Hall-Lobby	773-2300
Transportation (Employee Rideshare)	Department of Public Safety	Temporary-1200	773-3082
Tutoring	Learning Assistance Resource Center	Library-38	773-3488
Veterans Certification	Veterans Affairs Office	Langsdorf Hall-110A	773-2300
Women's Center	Women's Center	McCarthy Hall-33	773-3928
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# Undergraduate Students

#### Freshmen Requirements

You will qualify for regular admission as a first-time freshman if you

- 1. are a high school graduate,
- have a qualifiable eligibility index (see Eligibility Index Table next page) and
- have completed with grades of C or better the courses in the comprehensive pattern of college preparatory subject requirements:

English: 4 years

Mathematics, 3 years: algebra, geometry, and intermediate algebra

U.S. History or U.S. history and government: 1 year

Science, 1 year with laboratory: biology, chemistry, physics, or other acceptable laboratory science

Foreign Language: 2 years in the same language (may be waived for applicants who demonstrate competence in a language other than English equivalent to or higher than expected of students who complete two years of foreign language study)

Visual and Performing Arts, 1 year: art, dance, drama/theater, or music

Electives, 3 years: selected from English, advanced mathematics, social science, history, laboratory science, foreign language, visual and performing arts, and agriculture

#### Eligibility Index

The eligibility index is the combination of your high school grade point average and your test score on either the American College Test (ACT) or the Scholastic Aptitude Test (SAT). For this purpose we compute your grade point average on your final three years of high school studies, excluding physical education and military science, and use bonus points for certain honors courses. (see "High School Honors Courses" in this section of the catalog.) CSUF may offer you early, provisional admission based on your work completed through the junior year of high school and planned for your senior year.



		S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score
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		ny score	2.79	14	570	2.58	18	740	2.37	22	910	2.16	27	1080
2.99	10	410	2.78	14	580	2.57	18	750	2.36	23	920	2.15	27	1080
2.98	10	420	2.77	8 014	590	2.56	19	760	2.35	23	920	2.14	27	1090
2.97	10	430	2.76	15	600	2.55	19	760	2.34	23	930	2.13	27	1100
2.96	11	440	2.75	15	600	2.54	19	770	2.33	23	940	2.12	27	1110
2.95	11	440	2.74	15	610	2.53	19	780	2.32	23	950	2.11	28	1120
2.94	11	450	2.73	15	620	2.52	19	790	2.31	24	960	2.10	28	1120
2.93	11	460	2.72	15	630	2.51	20	800	2.30	24	960	2.09	28	1130
2.92	11	470	2.71	16	640	2.50	20	800	2.29	24	970	2.08	28	1140
2.91	12	480	2.70	16	640	2.49	20	810	2.28	24	980	2.07	28	1150
2.90	12	480	2.69	16	650	2.48	20	820	2.27	24	990	2.06	29	1160
2.89	12	490	2.68	16	660	2.47	20	830	2.26	25	1000	2.05	29	1160
2.88	12	500	2.67	16	670	2.46	21	840	2.25	25	1000	2.04	29	1170
2.87	12	510	2.66	17	680	2.45	21	840	2.24	25	1010	2.03	29	1180
2.86	13	520	2.65	17	680	2.44	21	850	2.23	25	1020	2.02	29	1190
2.85	13	520	2.64	17	690	2.43	21	860	2.22	25	1030	2.01	30	1200
2.84	13	530	2.63	17	700	2.42	21	870	2.21	26	1040	2.00	30	1200
2.83	13	540	2.62	17	710	2.41	21	880	2.20	26	1040	D I	2001	enigrosi-en
2.82	13	550	2.61	18	720	2.40	22	880	2.19	26	1050	A SECTION AND ADDRESS OF	2.00 doe	
2.81	14	560	2.60	18	720	2.39	22	890	2.18	26	1060		fy for reg	
2.80	14	560	2.59	18	730	2.38	22	900	2.17	26	1070	a	dmission	

You can calculate the index by multiplying your grade point average by 800 and adding your total score on the SAT. Or, if you took the ACT, multiply your grade point average by 200 and add ten times the composite score from the ACT. If you are a California high school graduate (or a legal resident of California for tuition purposes), you need a minimum index of 2800 using the SAT or 694 using the ACT; the table above shows the combinations of test scores and averages required.

If you neither graduated from a California high school nor are a legal resident of California for tuition purposes, you need a minimum index of 3402 (SAT) or 842 (ACT).

Applicants with grade-point averages above 3.00 (3.60 for nonresidents) are exempt from the test requirement. However, students are urged to take the SAT or ACT since campuses use test results for advisement and placement purposes.

You will qualify for regular admission to programs not impacted (See "Impacted Programs" in the Application Procedure section of this catalog) when the university verifies that you have a qualifiable eligibility index and that you will have completed the comprehensive pattern of 15 college preparatory units. A unit is one year of study in high school.

#### Transfer Requirements

You will qualify for admission as a transfer student if you have a grade point average of 2.0 (C) or better in all transferable units attempted, are in good standing at the last college or university attended, and meet the following standard:

you will meet the freshman admission requirements in effect for the term to which you are applying

- you were eligible as a freshman at the time of high school graduation and have been in continuous attendance in an accredited college since high school graduation
- were eligible as a freshman except for the college preparatory subjects and have completed appropriate college courses in the missing subjects and have been in continuous attendance in an accredited college since high school graduation
- (d) you have completed at least 56 transferable semester (84 quarter) units and have completed appropriate college courses to make up any missing subjects in college preparatory courses. (Nonresidents must have a 2.4 grade point average or better.)

Transferable courses are those designated for baccalaureate credit by the college or university offering the course.

### **High School Honors Courses**

Grades in up to eight semester courses, taken in the last two years of high school, that are designated honors in approved subjects receive additional points in grade point average calculations. Each unit of A in an approved courses will receive a total of 5 points; B, 4 points; C, 3 points.

#### International Baccalaureate Program

California State University, Fullerton recognizes the high scholastic quality of the International Baccalaureate Diploma Program. High school graduates who have participated in the program are encouraged to apply for admission, and those who have received the International Baccalaureate Diploma will be given special consideration for admission. Advanced placement and/or university credit for International Baccalaureate subject examinations may be awarded at the discretion of individual depart-

For example for a grade of 4 or better, the Departments of Foreign Language and Mathematics award credit in the following manner:

Foreign Languages. Subject to a successful oral interview with two CSUF instructors of the target languages, and upon their recommendation:

Higher Level Language B:

- Waiver of appropriate lower division requirements
- 3 to 12 units of upper division language credit

Subsidiary Level Language B:

- waiver of appropriate lower division requirements
- 0 to 6 upper division language credit (if 0 upper division is awarded, a minimum of 6 units of 200 level credit is recommended.)

Mathematics

Higher level

- two semesters of Calculus (Math 150A and Math 150B) Subsidiary level
- one semester of Calculus Math 150A or equivalent

#### Health Screening

All new and readmitted students born after January 1, 1957, will be notified of the requirement to present proof of measles and rubella immunizations. This is not an admissions requirement, but shall be required of students by the beginning of their second term of enrollment in CSU. Proof of measles and rubella immunizations shall also be required for certain groups of enrolled students who have increased exposure to these diseases.

#### Measles and Rubella Immunizations

The campus shall notify certain students born after January 1, 1957, of the CSU requirement to present proof of measles and rubella immunizations by the beginning of the second term of enrollment. At the beginning of the next term of enrollment, those so notified who have not presented acceptable proof of the immunizations shall be notified further of the need to comply before receiving registration materials to enroll for the succeeding term.

Persons subject to these health screening provisions include:

New students enrolling fall 1986 and later;

Readmitted students reenrolling fall 1986 and later;

Students who reside in campus residence halls;

Students who obtained their primary and secondary schooling outside the United States;

Students enrolled in dietetics, medical technology, nursing, physical therapy, and any practicum, student teaching, or field work involving preschool-age children, school-age children, or taking place in a hospital or health care setting. (Campuses may modify the list of types of study in this reference as appropriate to their curricula.)

The Student Health Center shall provide immunizations without cost to those students unable to obtain acceptable proof of immunizations.

#### **Test Scores**

Freshmen and transfer applicants who have fewer than 56 semester or 84 quarter units of transferable college credit must submit scores, unless exempt (See "Eligibility Index" section), from either the Scholastic Aptitude Test (SAT) of the College Board or the American College Testing program (ACT). If you are applying to an impacted program and are required to submit test scores, you should take the test no later than early December if applying for fall admission. Test scores are also used for advising and placement purposes. Registration forms and dates for the SATor ACT are available from school or college counselors or from a CSU campus testing office. Or, you may write to or call:

The College Board (SAT) Registration Unit, Box 592 Princeton, New Jersey 08541 (609) 771-7588

American College Testing Program (ACT) Registration Unit, P.O. Box 168 Iowa City, Iowa 52240 (319) 337-1270

#### **TOEFL** Requirement

All undergraduate applicants regardless of citizenship who have not attended schools at the secondary level or above for at least three years full-time where English is the principal language of instruction must present a score of 500 or above on the Test of English as a Foreign Language (TOEFL). The TOEFL results submitted must not have been earned more than two years prior to the desired enrollment date. A minimum score of 500 on the Test of English as a Foreign Language is required. Individual campuses may require a higher score. In manual evisuadargmoo

# Placement Test Requirements

The CSU requires new students to be tested in English and mathematics after they are admitted. These are not admission tests, but a way to determine whether you are prepared for college work and, if not, to counsel you how to strengthen your preparation. You might be exempted from one or both of the tests if you have scored well on other specified tests or completed appropriate courses.

### English Placement Test (EPT)

The English Placement Test (EPT) is required of all entering California State University undergraduate students who are not otherwise exempt. Exemptions are granted only for those students who present proof of having met *one* of the following criteria:

- a score of 25 or above on the ACTE (Enhanced) English Test (taken October 1989 or later)
- a score of 3, 4 or 5 on either the Language and Composition or the Composition and Literature examination of the College Board Advanced Placement Program
- a satisfactory score on the CSU English Equivalency Examination that qualifies a student for exemption from the English Placement Test
- a score of 470 or above on the Verbal section of the College Board Scholastic Aptitude Test (SAT-Verbal)
- a score of 22 or above on the ACT English Usage Test (taken prior to October 1989)
- a score of 600 or above on the College Board Achievement Test in English Composition with essay
- completion of an acceptable college course in English composition of four quarter or three semester units with a grade of C or better

California State University, Fullerton (CSUF) has established the following policy regarding compliance with this regulation:

All new and continuing undergraduate students who have not taken the EPT and who are not otherwise exempt must take the test prior to the beginning of their second semester of enrollment at CSUF. Students can only take the EPT exam once. Students who fail to comply with this policy shall be placed on administrative probation in their next semester of enrollment at Fullerton. Students on probation for this reason who do not take the EPT prior to the beginning of their third semester of enrollment at CSUF will be administratively disqualified from enrolling until they take the EPT.

Students who have taken the EPTexam but have not been placed in English 101 must remediate their English skills by taking Developmental Writing. Students who fail to comply with this policy will be placed on administrative probation prior to the beginning of the next semester of enrollment.

#### Entry Level Mathematics (ELM) Test

The (ELM) examination tests for entry level mathematics skills acquired through three years of rigorous college preparatory mathematics coursework (normally Algebra I, Algebra II and Geometry). All new undergraduate students must take the test or be exempted from it prior to placement in appropriate university mathematics coursework. Specific policies regarding retesting

and placement will be determined by the campus. Exemptions from the test are given only to those students who can present proof of one of the following:

- a score of 3 or above on the College Board Advanced Placement Mathematics examination (AB or BC)
- a score of 560 or above on the Mathematics section of the Scholastic Aptitude Test (SAT-Math)
- a score of 27 or above on the American College Test (ACT)

  Mathematics Test (taken prior to October 1989)
- A score of 28 or above on the Enhanced Act Mathematics Test (taken October 1989 or later)
- a score of 560 or above on the College Board Math Achievement Test, Level 1 or Level 2
- completion and transfer to the CSU of a college course that satisfies the General Education-Breadth Requirement or the Intersegmental General Education Transfer Curriculum requirement in Quantitative Reasoning, provided such course was completed with a grade of C or better.

The ELM test is offered only to admitted students and has no effect on admission decisions, but it must be taken and passed before the student can enroll in any course that satisfies the Mathematical Concepts and Quantitative Reasoning portion of the General Education-Breadth requirements.

California State University, Fullerton (CSUF) established the following policy regarding compliance with this regulation:

# Requirement To Take The ELM Test:

Effective fall 1986, all new and continuing undergraduate students who have not taken the ELM test and who are not otherwise exempt must take the test prior to the beginning of their next semester of enrollment at CSUF. Students who fail to comply shall be placed on administrative probation in their next semester of enrollment at Fullerton. Students on probation for this reason who do not take the test prior to the beginning of the third semester of enrollment at CSUF will be administratively disqualified from enrolling until such time as they take the ELM test.

# Students Who Have Taken But Not Passed The ELM Test:

Students who have taken but failed to pass the ELM test must participate in a program designed to assist them in learning the skills needed to pass the test. The program may be one offered at CSUF or an appropriate program on another campus. New and returning students must participate in an approved program in their first semester of enrollment after the receipt of the test results. Intensive Learning Experience is responsible for monitoring compliance with this provision and for certifying the appropriateness of the course in which the student wishes to participate.

Participation in a program to prepare for the ELM test must be continued. At least one attempt to pass the test must be made. Students who fail to comply with this requirement shall be placed on administrative probation. Students on probation for this reason must remediate their math skills before the beginning of the next semester or they will be administratively disqualified from enrolling.

Failure to take either of these tests as required, before the end of the first semester or second quarter of enrollment may lead to administrative probation, which according to Section 41300.1 of Title 5, California Code of Regulations, and CSU Executive Order 393, may lead to disqualification from future attendance.

Information bulletins and registration materials for the EPT and ELM will be mailed to all students subject to the requirements. The materials may also be obtained from the Office of Admissions and Records or the campus test office.

# Determination of Residence for Nonresident Tuition Purposes

The campus admissions office determines the residence status of all new and returning students for nonresident tuition purposes. Responses to the Application for Admission and, if necessary, other evidence furnished by the student are used in making this determination. A student who fails to submit adequate information to establish a right to classification as a California resident will be classified as a nonresident.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing residence determination for tuition purposes by The California State University is found in Education Code Sections 68000-68090, 68121, 68123, 68124, and 89705-89707.5, and in Title 5 of the California Code of Regulations, Sections 41900-41912. A copy of the statutes and regulations is available for inspection in the campus admissions

Legal residence may be established by an adult who is physically present in the state and who, at the same time, intends to make California his or her permanent home. Steps must be taken at least one year prior to the residence determination date to show an intent to make California the permanent home with concurrent relinquishment of the prior legal residence. The steps necessary to show California residency intent will vary from case to case. Included among the steps may be registering to vote and voting in elections in California; filing resident California state income tax forms on total income; ownership of residential property or continuous occupancy or renting of an apartment on a lease basis where one's permanent belongings are kept; maintaining active resident memberships in California professional or social organizations; maintaining California vehicle plates and operator's license; maintaining active savings and checking accounts in California banks; maintaining permanent military address and home of record in California if one is in the military 

The student who is within the state for educational purposes only does not gain the status of resident regardless of the length of the student's stay in California.

In general, the unmarried minor (a person under 18 years of age) derives legal residence from the parent with whom the minor maintains or last maintained his or her place of abode. The residence of a minor cannot be changed by the minor or the minor's guardian, so long as the minor's parents are living.

A married person may establish his or her residence independent of his or her spouse.

An alien may establish his or her residence, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States. An unmarried minor alien derives his or her residence from the parent with whom the minor maintains or last maintained his or her place of abode.

Nonresident students seeking reclassification are required by law to complete a supplemental questionnaire concerning financial independence.

The general rule is that a student must have been a California resident for at least one year immediately preceding the residence determination date in order to qualify as a "resident student" for tuition purposes. A residence determination date is set for each academic term.

At the Fullerton campus, the residence determination date for the fall term is September 20, and for the spring term is January 25.

Questions regarding residence determination dates should be directed to the campus admissions office which can give you the residence determination date for the term for which you are registering.

There are exceptions from nonresident tuition, including:

- 1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18, the exception continues for one year to enable the student to qualify as a resident student.
- 2. Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time.

- 3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult, not a parent, for the two years immediately preceding the residence determination date. Such adults must have been a California resident for the most recent year.
- 4. Dependent children and spouses of persons in active military service stationed in California on the residence determination date. The exception, once attained, is not affected by retirement or transfer of the military person outside the
- 5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education.
- 6. Dependent children of a California resident who has been a California resident for the most recent year. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous residence is maintained at an institution.
- 7. Graduates of any school located in California that is operated by the United States Bureau of Indian Affairs, including, but not limited to, the Sherman Indian High School. The exception continues so long as continuous attendance is maintained by the student at an institution.
- 8. Certain credentialed, full-time employees of California school districts.
- 9. Full-time State University employees and their children and spouses: State employees assigned to work outside the State and their children and spouses. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for one
- 10. Certain exchange students.
- 11. Children of deceased public law enforcement or fire suppression employees, who were California residents, and who were killed in the course of law enforcement or fire suppression duties.

The initial campus determination of residency classification is made by the evaluations unit of Admissions and Records. The final campus residency decision is made by the Director of Admissions and Records. Written appeals may be made to the Director in Langsdorf Hall 102.

Any student, following a final campus decision on his or her residence classification, only may make written appeal within 120 calendar days of notification of the final decision on campus of the classification to:

The California State University Office of General Counsel 400 Golden Shore Long Beach, California 90802-4275

The Office of General Counsel may make a decision on the issue, or it may send the matter back to the campus for further review. Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is subject to discipline pursuant to Section 41301 of Title 5 of the California Code of Regulations. Resident students who become nonresidents, and nonresident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the admissions office. Applications for a change in classification with respect to a previous term are not accepted.

The student is cautioned that this summation of rules regarding residency determination is by no means a complete explanation of their meaning. The student should also note that changes may have been made in the rate of nonresident tuition, in the statutes, and in the regulations between the time this catalog is published and the relevant residence determination date.

# **Application Procedures**

Applications may be obtained from the admissions office at any of the campuses of The California State University or at any California high school or community college. Requirements for admission to California State University, Fullerton are in accordance with Title 5, Chapter 1, Sub-chapter 3, of the California Code of Regulations. A student unsure of these requirements should consult a high school or community college counselor or the admissions office at California State University, Fullerton.

The CSU advises prospective students that they must supply complete and accurate information on the application for admission, residence questionnaire and financial aid forms. Further, applicants must submit authentic and official transcripts of all previous academic work attempted. Failure to file complete, accurate and authentic application documents may result in denial of admission, cancellation of academic credit, suspension or expulsion (Section 41301, Article 1.1, Title 5, California Code of Regulations).

Prospective students, applying for part-time or full-time programs of study, in day or evening classes, must file a complete application as described in the admissions booklet. The \$55 nonrefundable application fee should be in the form of a check or money order payable to The California State University. The application fee may not be transferred or used to apply to another term. Applicants need file only at their campus of first choice. An alternative choice campus and major may be indicated on the application. An alternate campus and major may be indicated on the application, but applicants should list as alternate campus only a CSU campus that also offers the major. Generally, an alternate major will be considered at the first choice campus before an application is redirected to an alternate campus choice.

# How to Apply for Admission

Submit a completed application for admission within the announced filing period accompanied by the required application fee to:

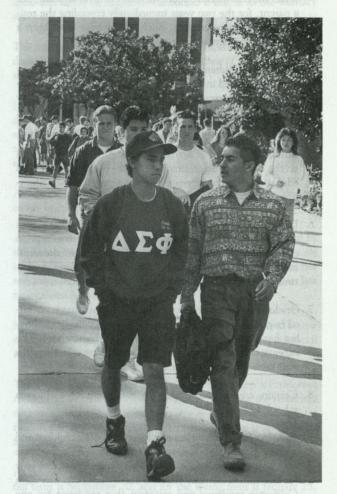
Office of Admissions and Records California State University, Fullerton Fullerton, California 92634-9480

When asked to do so request required transcripts of record of all previous scholastic work from each school or college attended. The transcripts required at CSUF are:

— for undergraduate applicants with fewer than 56 transferable semester units:

(a) the high school transcript, and

(b) a transcript from each college or university attended.



- for undergraduates with 56 or more transferable semester units: 101 sterring admissions materials for stinu
- (a) a transcript from each college or university attended.
  - for graduates:
- (a) applicants for unclassified postbaccalaureate standing with no degree or credential objective must submit a transcript from the college or university where the baccalaureate was earned. Further, one transcript from other institutions attended is required as necessary so that the university has a complete record of the last 60 semester units attempted prior to enrollment at Fullerton.
  - (b) applicants for a master's degree or teaching credential, or both, must submit two copies of the transcript from each college or university attended.

Note: In addition, all students should have a personal set of college transcripts for advising purposes. All transcripts must be received directly from the issuing institutions and become official records of the university; such transcripts therefore cannot be returned or reissued. Foreign language transcripts must be accompanied by certified English translations.

3. All undergraduate students who have completed fewer than 56 semester or 84 quarter units of transferable work are required to submit scores from either one of two national testing programs before eligibility for admission to the university can be determined. This requirement does not affect undergraduate students who have previously attended CSUF and who have submitted ACT or SAT scores at the time of their first admission. Registration forms and test dates for either test may be obtained from school or college counselors, from the address below, or from campus testing offices. For either test, submit the registration form and fee at least one month prior to the test date.

> ACT Address American College Testing Program, Inc. Registration Unit, P.O. Box 168 Iowa City, Iowa 52240

SAT Address College Entrance Examination Board Registration Unit P.O. Box 592 Princeton, New Jersey 08541

Applicants to graduate programs must submit the scores of any qualifying examinations required in their prospective programs of study.

# Impacted Programs A nonspilor A

The CSU designates programs to be impacted when more applications are received in the first month of the fall and spring filing period than the spaces available. Some programs are impacted at every campus where they are offered; others are impacted at some campuses but not all. You must meet supplementary admissions criteria if applying to an impacted program.

The CSU will announce before the opening of the fall filing period which programs are impacted for the academic year. That announcement will be published in the CSU Review, distributed to high school and college counselors. We will also give information about the supplementary criteria to program applicants.

You must file your application for admission to an impacted program during the first month of the filing period. Further, if you wish to be considered in impacted programs at two or more campuses, you must file an application to each. Nonresident applicants are rarely admitted to impacted programs.

Supplementary Admission Criteria: Each campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may include ranking on the freshman eligibility index, the overall transfer grade point average, and a combination of campus-developed criteria. If you are required to submit scores on either the SAT or ACT, you should take the tests no later than December if applying for fall admission. The supplementary admission criteria used by the individual campuses to screen applicants appear periodically in the CSU Review and are sent by the campuses to all applicants seeking admission to an impacted program.

Unlike unaccommodated applicants to locally impacted programs, who may be redirected to another campus in the same major, unaccommodated applicants to systemwide impacted programs may not be redirected in the same major, but may choose an alternative major either at the first choice campus or another campus.

At the time of the preparation of this catalog, no majors at California State University, Fullerton have been declared impacted. Such circumstances are liable to change so early application is advised.

# **Application Filing Periods**

Terms Filing Period Begins Filing Period Duration Fall Previous November Until application Spring Previous August categories are filled

## Filing Period Duration

Each campus accepts applications until capacities are reached. Many campuses limit undergraduate admission in an enrollment category because of overall enrollment limits. If applying after the initial filing period, consult the campus admission office for current information.

# Application Acknowledgment

You may expect to receive an acknowledgement from your first choice campus within two to four weeks of filing the application. A notice that space has been reserved for you will also include a request that you submit the records necessary for the campus to evaluate your qualifications. You may be assured of admission if the evaluation of your qualifications indicates that you meet admission requirements. Such a notice is not transferable to another term or to another campus.

# Hardship Petitions

Fullerton has established procedures to consider qualified applicants who would be faced with an extreme hardship if not admitted. Prospective petitioners should write to the director of admissions and records regarding specific policies governing hardship admission.

### Records Retention

The university retains the admissions materials for those who apply, but who for whatever reason do not enroll for two years. For those who do enroll the university will retain the materials in student folders, including transcripts of the record of work completed elsewhere, for five years beyond the date of last attendance.

Records of academic performance at California State University, Fullerton, including individual student records, faculty grade lists, and graduation lists are kept permanently.

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# Admission Requirements



# Admission Requirements for First-Time Freshmen

High School Graduates

You will qualify for regular admission as a first-time freshman if you

- 1. are a high school graduate
- 2. have a qualifiable eligibility index (see previous chart), and
- have completed with grades of C or better the courses in the comprehensive pattern of college preparatory subject requirements:

English: 4 years

Mathematics, 3 years: algebra, geometry, and intermediate algebra

U.S. History or U.S. history and government: 1 year

Science, 1 year with laboratory: biology, chemistry, physics, or other acceptable laboratory science

Foreign Language: 2 years in the same language (may be waived for applicants who demonstrate competence in a language other than English equivalent to or higher than expected of students who complete two years of foreign language study)

Visual and Performing Arts, 1 year: art, dance, drama/ theater, or music

*Electives*, 3 years: selected from English, advanced mathematics, social science, history, laboratory science, foreign language, visual and performing arts, and agriculture

### Subject Requirements

The California State University requires that all undergraduate applicants for admission complete with a C or better a comprehensive pattern of college preparatory study totaling 15 units. A "unit" is one year of study in high school. If you have completed at least 15 college preparatory units, you may offset a one unit shortage in one subject area by completing an extra unit in another subject area. This option is available from fall 1992 through summer 1995. Although you will be granted regular admission under this option, you are strongly advised to complete all courses in the college preparatory pattern, especially mathematics and English so that you will be adequately prepared to begin your university studies. Please see your high school counselor for further information.

Foreign Language Subject Requirement: The foreign language subject requirement may be satisfied by applicants who demonstrate competence in a language other than English equivalent to or higher than expected of students who complete two years of foreign language study. Consult with your school counselor or any CSU campus admission or relations with schools office for further information.

Making Up Missing College Preparatory Subject Requirements: Undergraduate applicants who did not complete the subject requirements while in high school may make up missing subjects in any of the following ways:

- 1. Complete appropriate courses with a C or better in adult school or high school summer sessions.
- 2. Complete appropriate college courses with a C or better. One college course of at least 3 semester or 4 quarter units will be considered equivalent to one year of high school study.
- 3. Earn acceptable scores on specified examinations.
- 4. Applicants with 56 or more semester (84 quarter) units may complete, with a C or better in each course, one of the following alternatives:
  - a. 1987 or earlier high school graduates: the CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3 semester units);
- b. 1988 and later high school graduates: complete a minimum of 30 semester (45 quarter) units to be chosen from courses in English, arts and humanities, social science, science, and mathematics of at least equivalent level to courses that meet general education or transfer curriculum requirements. Each student must complete all CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3 semester units) as part of the 30 unit requirement.

Please consult with any CSU admissions office for further information about alternative ways to satisfy the subject requirements.

#### Substitutions for Disabled Students

Disabled student applicants are strongly encouraged to complete college preparatory course requirements if at all possible. If an applicant is judged unable to fulfill a specific course requirement because of a disability, alternative college preparatory courses may be substituted for specific subject requirements. Students who are deaf and hearing impaired, are blind and visually impaired, or have learning disabilities, may in certain circumstances qualify for substitutions for the foreign language, laboratory science, and mathematics subject requirements. Substitutions may be authorized on an individual basis after review and recommendation by the applicant's academic adviser or guidance counselor in consultation with the director of CSUF's Disabled Student Services.

Although the distribution may be slightly different from the course pattern required of other students, students qualifying for substitutions will still be held for 15 units of college preparatory study. Students should be aware that course substitutions may limit later enrollment in certain majors, particularly those involving mathematics. For further information and substitution forms, please contact the director of CSUF's Disabled Student Services.

#### Provisional Admission

The university may provisionally admit first-time freshman applicants based on their academic performance through the junior year of high school and planned for the senior year. California State University, Fullerton will monitor the senior year of study of those provisionally admitted to ensure that those so admitted complete their senior year of studies satisfactorily, including the required college preparatory subjects, and graduate from high school.

#### Non-High School Graduates

Applicants over 18 years of age, but who have not graduated from high school, will be considered for admission as first-time freshmen only when preparation in all other ways is such that the university believes promise of academic success is equivalent to that of eligible California high school graduates.

#### High School Students

Students still enrolled in high school will be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Such admission is only for a given program and does not constitute the right to continued enrollment.

#### **Adult Students**

As an alternative to regular admission criteria, an applicant who is twenty-five years of age or older may be considered for admission as an adult student if the following basic conditions are met:

- 1. Possesses a high school diploma (or has established equivalence through either the Tests of General Educational Development (GED) or the California High School Proficiency Examination).
- 2. Has not been enrolled in college as a full-time student for more than one term during the past five years. Part-time enrollment is permissible.

3. If there has been any college attendance in the past five years, has earned a C average or better.

Consideration will be based upon a judgement as to whether the applicant is as likely to succeed as a regularly admitted freshman or transfer and will include an assessment of basic skills in the English language and mathematical computation.

# Admission Requirements for Undergraduate Transfer Students

You will qualify for admission as a transfer student in a non-impacted major if you have a grade point average of 2.0 (C) or better in all transferable units attempted, are in good standing at the last college or university attended, and meet the following standard:

- you will meet the freshman admission requirements in effect for the term to which you are applying (See "Freshman Requirements," in the preceding section).
- 2. you are eligible as a freshman at the time of high school graduation and have been in continuous attendance in an accredited college since high school graduation;
- you were eligible as a freshman at the time of high school graduation except for the subject requirements, have made up the missing subjects and have been in continuous attendance in an accredited college since high school graduation.
- 4. you have completed at least 56 transferable semester (84 quarter) units and have made up any missing subject requirement (See "Making up Missing College Preparatory Subjects section). Nonresidents must have a 2.4 grade point average or better.

Transferable courses are those designated for Baccalaureate credit by the college or university offering the courses.

# Admission Requirements for International Students

The university is pleased to accept applications from international students. The CSU must access the academic preparation of foreign students. For this purpose, "foreign students" include those who hold US visas as students, exchange visitors, or in other non-immigrant classifications.

The CSU uses separate requirements and application filing dates in the admission of foreign students. Verification of English proficiency (See the section on TOEFL Requirement for undergraduate applicants), financial resources, and academic performance are all important considerations for admission. Academic records from foreign institutions must be on file at least 8 weeks before registration for the first term and, if not in English, must be accompanied by certified English translations.

Freshman applicants applying directly from overseas should have outstanding academic qualifications and meet TOEFL score requirements. Applicants who are graduates of foreign secondary schools must have preparation equivalent to that required of eligible California high school graduates. The university will carefully review the previous record of all such applicants and only those with promise of academic success equivalent to that of eligible California high school graduates will be admitted. Undergraduate transfers, who have completed a two-year program in an accredited institution of higher education, with a good academic record and satisfactory TOEFL scores, shall receive priority for admission.

Postbaccalaureate applicants who have completed a bachelor's degree or its equivalent, with a strong academic record, and satisfactory TOEFL scores from an accredited institution may be considered for admission as graduate students.

The university has established deadlines to insure the timely processing of all applications and to enable admitted applicants to make arrangements to reach the U.S. and the campus prior to orientation and registration. Early application is strongly advised due to strong demand for programs. Newly admitted students are required to take an English Placement Examination prior to enrollment in classes (mid-August for fall semester and mid-January for spring semester).

Applications may be submitted according to the following schedule:

#### For Fall Semester

Apply beginning November 1 of the preceding year. Application must be completed with supporting documents by April 15.\*

#### For Spring Semester

Apply beginning August 1 of preceding year. Application must be completed with supporting documents by October 31.\*

All international student applicants must declare a major field of study when the application is filed. Campus programs of study which receive more applications than spaces are available, have been declared impacted, and are not open to nonresidents, foreign or domestic.

All applicants whose native language is other than English are required to present scores for the Test of English as a Foreign Language (TOEFL) before they can be admitted to the university. Undergraduate applicants must achieve a score of 500; graduate applicants a score of 550, graduate music applicants 560, and MBA applicants a score of 570. Adequate performance on the TOEFL is mandatory for admission.

<sup>\*</sup>Please be advised that file completion deadlines may be subject to change.

Applicants should obtain the TOEFL Bulletin of Information and registration forms well in advance. Copies of this bulletin and registration forms are often available at American embassies and consulates, offices of the United States Information Service, United States educational commissions and foundations abroad, bi-national centers, and several private organizations. Those who cannot obtain locally a TOEFL Bulletin of Information should write to: Test of English as a Foreign Language, Educational Testing Services, P.O. Box 6151, Princeton, New Jersey, USA, 08541-6151.

International student applicants must include a statement of financial support accompanied by a bank statement from their sponsor. Students sponsored by an international organization or home government agency must include a letter of scholarship support specifying this university and the students proposed degree and program of study.

Transcripts of all educational documents in languages other than English must be accompanied by translation into English certified by independent agencies. All academic records must be received directly from the issuing institutions and become official records of the university.

International student applicants who are admitted by the university will be issued form I-20 which is used to obtain an F-1 student visa from a U.S. Embassy or Consulate overseas. Students transferring from a U.S. institution will use form I-20 to apply for transfer authorization through the Immigration and Naturalization Service. Arrival, orientation and registration information from the Office of International Education and Exchange will accompany the admission materials mailed to new students.

# Admission Requirements for Postbaccalaureate and Graduate Students

See admissions information in the "Graduate Regulations" section of this catalog.

# Cancellation of Admission

A student admitted to the university for a given semester but who does not register in the specified semester will have the admission canceled. The student must file a new application form when again seeking admission and must follow the complete application procedure and meet the current admission requirements.

# Admission Requirements for Summer Session Students

Although the quality of the program and most of the course offerings are the same as in the regular session, students who wish to enroll in summer session courses must register for them through the Office of Extended Education. Students normally must be high school graduates, however, and are expected to have satisfied the prerequisites for the courses in which they register. Admission to summer session does not grant admission to the regular session.

### Readmission of Former Students

A student previously enrolled in the university, planning to return after an absence of more than one semester, must file a new application for admission. Unless a leave of absence was granted, catalog requirements at the time of readmission will apply. Please see the "Stop-Out Policy" section in the regulations subchapter of this catalog for further information on applications for readmission.

#### Former Students in Good Standing

A student who left the university in good standing will be readmitted provided any academic work attempted elsewhere since the last attendance does not change his or her scholastic status. Transcripts of the record of any work attempted in the interim are required.

#### Former Students Who Were on Probation

A student on probation at the close of the last enrollment will be readmitted on probation provided he or she is otherwise eligible. The student must furnish transcripts of any college work taken during the absence.

## Former Students Who Were Disqualified

The readmission of a previously disqualified student is by special action only. Ordinarily the university will consider an application for reinstatement only after the student has remained absent for a minimum of one year following disqualification and has fulfilled all recommended conditions. In every instance, readmission is based on evidence, including transcripts of study completed elsewhere after disqualification, including transcripts from California State University's Extended Education program which show improvement in the CSUF grade point average. If readmitted, the student is placed on scholastic probation.



# Transfer Credits

## **Evaluation of Transfer Credits**

When a student is admitted, the Office of Admissions and Records will evaluate previous college work in relation to the requirements of Fullerton. All degree candidates will be issued a credit summary during the first semester of attendance which serves as a basis for determining remaining requirements for the student's specific objectives. The admissions office will convert quarter units of credit transferred to the university to semester units by multiplying quarter-unit totals by two-thirds.

Once issued to a student, the evaluation remains valid as long as the student enrolls at the date specified, pursues the objective specified, and remains in continuous attendance. The student will not be held to additional graduation requirements unless such requirements become mandatory as a result of changes in the California Administrative Code or the California Education Code. If the student does not remain in continuous attendance and has not applied for and been granted a formal leave of absence, the evaluation issued upon readmission will specify the remaining requirements for the student's objectives.

In view of the foregoing regulations, the student should notify the Office of Admissions and Records immediately of a change in the objective specified in the evaluation. While the evaluation for a student remains valid, the student is held responsible for complying with all changes in regulations and procedures which may appear in subsequent catalogs.

# Acceptance of Credit

Credit for work completed at accredited institutions, other than course work identified by such institutions as remedial or in other ways as being nontransferable, will be accepted toward the satisfaction of baccalaureate degree and credential requirements at the university within limitations of residence requirements and community college transfer maximums.

# Transfer of Credit From a Community College

Upper division credit is not allowed for courses taken in a community college. Credential credit is not allowed for courses in professional education taken in a community college. This does not invalidate credit for preprofessional courses taken at a community college, such as introduction to education, art or design, arithmetic, or music for classroom teachers. After a student has completed 70 units of college credit at a community college, no further community college units may be accepted for unit credit.

# Credit by Examination

California State University, Fullerton grants credit to those students who pass examinations that have been approved for credit systemwide. These include the Advanced Placement Examinations, CSU English Equivalency Examination and some CLEP examinations.

Students may challenge courses by taking examinations developed at the campus. Credit shall be awarded to those who pass them successfully.

# Credit by Advanced Placement

Students who have successfully completed courses in the advanced placement program of the College Entrance Examination Board (defined as receiving a score of 3, 4 or 5) shall be granted credit for each advanced placement course toward graduation, advanced placement in the university's sequence of courses and credit for curriculum requirements.

Cal State Fullerton grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. Students who present scores of three or better will be granted semester units of college credit as listed below.

Advanced Placement	Equivalent	Semester
Course	Course: CSUF	Units
American History	History 180	3
Art History	Art 201A,B	
Studio Art	Art 103 or 104	
	Art 107A or 107B	
Biology	Bio Sci 101	A 30110
Chemistry	Chemistry and of participations	62
	120A,B	
Computer Science	Computer Science 121	33
AND DESCRIPTION OF STREET ORN	Computer Science 131	33
English	English 101	3
ecologica me administra	English 200	3. A
European History		
French	French 101, 102	104
German	German 101, 102	104
Government and		
Politics (Comparative)	lower division elective	36 106
Politics (United States)	Poli Sci 101	37
Latin 4	Latin 101	3
Latin 5 6 mo	Latin 101, 102	6
Math A & B	M-1 150A	1
Math B & C	Math 150A,B	11180
	Physics 211A,B	65
	Spanish 101, 102	
	amon e ni ne let aniac sube-	

<sup>1</sup>Consult the Department of Art for applicability of advanced placement examina-

<sup>2</sup>To complete the requirement for Chemistry 120A, B, the student must successfully complete four units of Chemistry 120A and 120B laboratory at Cal State Fullerton. Consult the Department of Computer Science for applicability of advanced place ment examination credit.

<sup>4</sup>No Credit for literature.

<sup>5</sup>To complete the requirement for Physics 211A,B the student must successfully complete two units of Physics 211A and 211B laboratory at CSUF.

<sup>6</sup>Consult the Department of Political Science for applicability of advanced placement examination credit. These units do not count toward the major. To meet the state requirement, you must take Political Science 300.

# Credit for Extension and Correspondence Courses

The maximum amount of credit through correspondence and extension courses which may be allowed toward the bachelor's degree is 24 units, if otherwise applicable.

# Credit for Noncollegiate Instruction

Cal State Fullerton grants undergraduate degree credit for successful completion of non-collegiate instruction, either military or civilian, appropriate to the baccalaureate, that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. The number of units allowed are those recommended in the Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training Programs. Students who have at least one year of active military service may be granted six or 12 units of undergraduate credit.

# Credit for Prior Learning

California State University, Fullerton grants up to 30 units of undergraduate credit for learning, knowledge, or skills-based experience that has been documented and evaluated according to campus policy. Requests for Credit for Prior Learning will be evaluated individually.

# College Level Examination Program

The university shall accept three semester units of credit for each of the following College Level Examination Program (CLEP) examinations, subject to achievement of the scores indicated, provided the examination was not taken previously within one calendar year and that degree credit has not been granted for previous course work at the equivalent or at a more advanced level than for the examination in question.

Examination	Passing score
Mathematics General Exam	50*
College Algebra-Trigonometry	49
Introductory Calculus and Analytic Geometry	48
Statistics And Andrews Andrews and Andrews	49
General Chemistry	48

Fullerton may grant additional credit and advanced standing based upon CLEP examination results using as minimum standards:

#### General Examinations

1. That the student achieve a score at or above the 50th percentile, college sophomore norms.

\*On both parts of examination.

2. That no unit credit be granted for any test in the general examinations, but that up to six units of general education requirements be waived for each test completed with the appropriate score.

#### Subject Examinations

- 1. That the student submit a score at or above the 50th percentile of those in the norm group who earned a mark of C or better.
- 2. That equivalency to Fullerton courses be determined by the appropriate academic department in conjunction with the Office of Admissions and Records.
- 3. That university credit shall have not been previously earned in the courses in question.

In no case will credit so awarded count toward residence credit.

# **English Equivalency Examination**

Students passing the California State University English Equivalency Examination shall be awarded six semester units of credit (English 101 and 200) provided credit has not been granted previously at the equivalent or at more advanced levels. Further, those who pass this optional examination are exempt from the requirement to take the English Placement Test.

Following are the categories of performance and scores which qualify for credit and/or exemption of the English Placement Test:

1. Pass for credit and exemption from the English Placement Test

A student receiving a minimum score of 14 on the EEE essay and a minimum multiple choice converted score of 51 shall receive credit and exemption. A student earning a minimum score of 15 on the EEE essay and a minimum multiple choice converted score of 43 shall also receive credit and exemption.

2. Exemption from the English Placement Test (EPT) only.

Students scoring at least 12 on the essay with a minimum converted multiple choice score of 36 or more shall receive exemption from the EPT, but no credit. Also, students with an essay score of at least 15 shall be awarded exemption, regardless of the converted multiple choice score.

previously at the equivalent of at more advanced lessels. Further, those who pass this optional exemination are courage from the requirement to take the English Placement Test.

quality for credit and/or excitation of the lengthsh Placement Tests in the content of the state of the content of the content

Students scoring at least 12 of this essay with e-manufactured multiple choice score of 35 or more shall receive exemption from the EPT, but no credit. Also, sudents with an essay score of at least 15 shall be awarded exemption regardless of the converted multiple choice score.

Consult the Department of Are by applicability of advectors placement assertion tool closes.

To consider the requirement for Character (2024). The seadout in its substitution of the bomplecetor, onto a Character (2024) and a Character are at Cal Sons (2024) and Consoft in the Department of Componer 5, sonce for again status of advanced place ideas a continuous craim.

No Credit for Renature

To complete the requirement for Physics 211A. B channelest must set could complete movement of Preses 211A and 2110 security in \$57.75.

\*Consult the Department of Political Science are appreciation of advanced pairment examination credit. These materials are countries of the materials.

To meet the case requirement, you must take Political Science 100.

2. That no unit credit be graphed for any cest in the general examinations, but that up to six units of general concaring requirements be writted for each test locateled with the propriete score

That the student submit a score at or above the 50th percentile of those in the room though who earned a mark of G. of

2. That equivalency to Published courses he determined by the paperprists academic department in conformion with the Office of Admissions and Rosent.

Office of Admissions and Records.

on D for when Damming a consequence of the majorestry credit shall have not been previously earned in the courses in question.

In no case will create so awarded count roward resource credit.

# English Equivalency Examination

Students passing the California State University English Equivalency Examination shall be awarded at sentester tinto of credit (English 101-and 200) provided credit has not been proved as 1 seed allolers, agricultural, ignicitat sat at an administration of amorgous bestituters into betterminated may and the action and addition gramma a sourt set when a sentence assesses and the gramma and the sentence

# College Level Examination Program

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Alerton may meet additional crofts and advanced standing based from CLEP exemplation results using as minimum standards:

#### Cross & Existinations

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# Registration Information

#### Orientation

Various opportunities are provided for new students to obtain information relating to academic programs, student services and activities, and other aspects of university life. Information about specific programs is published separately.

# Registration

#### Class Schedule

A complete listing of courses offered will be found in the class schedule published prior to the start of each semester. This publication, which may be purchased in the Titan Bookstore, also includes detailed information pertaining to the semester including class enrollment and fee payment procedures.

It is important that students familiarize themselves not only with the academic policies stated in this catalog but also with the requirements and procedures in the class schedule as both are used in the selection of classes for the semester.

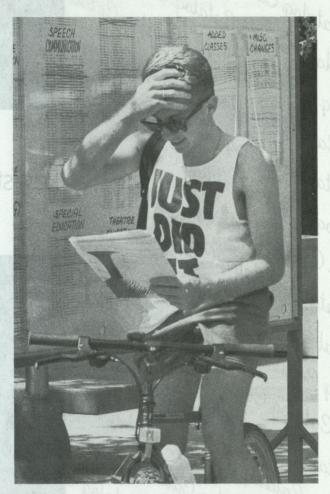
#### Registration

Registration involves two steps — class enrollment and fee payment, and may be accomplished through early registration by mail, walk-through registration during the month preceding the first day of instruction, or through late registration during the first three weeks of instruction. Most students should find early registration by mail advantageous.

At registration, every student is required to file a study program with the Office of Admissions and Records. The filing of a program by the student and its acceptance by the university obligates the student to perform the designated work to the best of his or her ability. It is emphasized that registration does not become official until all fees have been paid.

# Computerized Records System

The student records system, including the registration process, is computerized. It is a fact of life in a large institution such as Cal State Fullerton that computerization is essential. Thus, there are requirements for data forms, code numbers, student file numbers and for meeting precise criteria for recording data, which introduce impersonal elements in the student records system. Despite these conditions, every effort is made to provide courteous, efficient and personalized service to students and the entire university community. To assist in providing this service, students are urged to be careful and accurate in preparing forms, especially the course request registration forms and change of program forms. Accurate preparation of information will assure each student of error-free records.



# Controlled Entry Classes

In general, all courses listed in the semester class schedule shall be available to all matriculated students except for appropriate academic restrictions as stated in the schedule and the catalog. These restrictions, including special qualifications and other academic limitations, on class entry shall be published in the class schedule as appropriate footnotes to the designated class or class section and shall be consistent with the catalog.

# Late Registration

The last day to register late each semester will be announced in the class schedule. Late registrants will find themselves handicapped in arranging their programs and must pay a \$25 late registration fee in addition to regular fees.

# Changes in Program After Registration

Each student is responsible for the program of courses listed at registration. Changes may be made thereafter only by filing a change of program form in the Office of Admissions and Records following procedures announced in the class schedule.

Students may add classes to their programs of study during the first three weeks of instruction. They may drop classes through the first two weeks. After the second week of instruction the university expects students to complete all courses in which they are enrolled. If students must withdraw after the deadline for dropping classes published in the class schedule, they are subject to the withdrawal policy contained in the "University Regulations" section of this catalog. In all instances, dropped classes must be reported to the Office of Admissions and Records; students not attending class are not dropped automatically.

# Concurrent Enrollment Outside the CSU System

A student enrolled at the university may enroll concurrently for additional courses at another institution outside the CSU system without advance written approval from the student's academic adviser or the Office of Admissions and Records. Students are reminded that the study load in the proposed combined program of study may not exceed the maximum number of units authorized at this university.

# Enrollment at Other CSU Campuses

Fullerton students may enroll at other campuses of The California State University either while concurrently enrolled at Cal State Fullerton or as visitors. There are certain eligibility requirements and enrollment conditions that must be met, including completion of at least one semester at Cal State Fullerton and being in good academic standing. Information and application forms may be obtained from the Office of Admissions and Records.

# Visitor Enrollment

Students enrolled at other campuses of The California State University may enroll at Cal State Fullerton while concurrently enrolled at their home campus or as visitors. Information about eligibility requirements, enrollment conditions and application forms are available from the Office of Admissions and Records at the home campus.

#### Auditors

A properly qualified student may enroll in classes as an auditor. The student must meet the regular university admission requirements and must pay the same fees as other students. See the description of Audit in the "University Regulations" section of this catalog under "Administrative Symbols."

#### Disabled Students

Disabled students who require assistance should consult with Disabled Student Services prior to the announced semester registration period so that special arrangements can be made.

## Veterans

California State University, Fullerton is approved by the Bureau of School Approvals, State Department of Education, to offer programs to veterans seeking benefits under state and federal legislation. All students seeking veterans' benefits must have a degree or credential objective.

Applications for benefits should be filed well in advance of the semester in which the veteran plans to use these benefits to have the authorization at the time of registration.

# Schedule of Fees 1993-94

Tuition is not charged to legal residents of California unless they are seeking a duplicate degree. The 1993-94 and 1994-95 schedule of fees will be published in the class schedules for those years. The following are the fees and nonresident tuition assessed at the time of preparing this catalog.

Application fee (nonrefundable)
Payable by check or money order at time
application is made\$55
All Students (Per Semester Fees)
State University fee
0 to 6 units
7 or more units
Facilities fee
Associated Students fee
University Union fee
Instructionally-related activity fee 10
Instructionally-related activity fee
the court of the come feet at other continues for the
all students not to exceed
\$2250 tuition per semester \$150 per unit
Nonresident and Foreign Visa Students
Nonresident tuition fee (in addition to fees
charged all students) per unit \$246
Summer Session
Course fee per unit see current bulletin
Associated Students fee
University Union fee 5
of School Approvals, State Department of Education, to other
Extension Fees
Per unit see current bulletin
Other Fees or Charges
Late registration fee (in addition to other fees listed above)
Check returned from bank for any cause
Transcript fee
Graduation and diploma fee
Failure to meet an administrative time limit 20
Miscellaneous course fees Select courses
list instructional fees for class materials as indicated in the

class schedule and under the course description in the catalog. Students may purchase these materials through the university (information given at first class meeting)



A student enrolled at the university may enroll concurrently for additional courses at another institution outside the CSU system without alwance written approval from the student's academic adviser or the Office of Admissions and Records. Students are reminded that the study load in the proposed combined program of study may not exceed the maximum number of units authorized at this university.

but are not required to do so.

Consult current class schedule for further information.

Auditors pay the same fees as others.

Fees are subject to change by the Trustees of The California State University without advance notice.

## Alan Pattee Scholarships

Children of deceased public law enforcement or fire suppression employees, who were California residents and who were killed in the course of law enforcement or fire suppression duties, are not charged fees or tuition of any kind at any California State University campus, according to the Alan Pattee Scholarship Act, Education Code Section 68121. Students qualifying for these benefits are known as Alan Pattee scholars. For further information contact the Admissions Office, which determines eligibility.

#### Waiver of Fees

Section 32320 of the California Education Code provides for the waiver of certain fees other than nonresident tuition, for certain veterans' dependents. Those who meet one or more of the following criteria should present to the university registrar a certificate of eligibility obtained from the Division of Educational Assistance, California Department of Veterans Affairs, on or before the date of registration.

- A. Children of veterans who have service-connected disabilities and whose annual income not including governmental compensation for such service-connected disability does not exceed \$5,000.
- B. Children of veterans killed in action or because of a serviceconnected disability, where the annual income of such children, including the value of any support received from parents and the annual income of surviving parents, does not exceed \$5,000. No limitations on age or length of residency.

## Refund of Fees

Details concerning fees which may be refunded, the circumstances under which fees may be refunded, and the appropriate procedure to be followed in seeking refunds may be obtained by consulting Section 42201 (parking fees), 41913 (nonresident tuition), 42019 (housing charges) and 41802 (all other fees) of Title 5, California Code of Regulations. In all cases it is important to act quickly in applying for a refund.

Information concerning the policy and appropriate procedure to be followed in seeking a refund may be obtained from the Office of the Registrar or the Cashier's Office.

# Parking Fees amabute basisone A

Semester pass (nonreserved spaces):
Regular and limited students
(4-wheeled vehicle) \$54.00
Regular and limited students
(2-wheeled vehicle)
Coin operated gate per exit
Summer session (4-wheeled vehicle) 36.00
Summer session (2-wheeled vehicle) 9.00

## Typical Student Expenses

Typical school year budgets for California residents living at home or making other housing arrangements will vary widely. It is estimated that, including a \$4,700 yearly allowance for room and board, and \$400 for books and supplies, the total cost will approximate \$7,600 for an unmarried person. Nonresident students must also allow for nonresident tuition in addition to those fees listed above.

# State University Fee

The state university fee provides financing for the following student services.

- 1. Social and Cultural Development Activities. Provides for the coordination of various student activities, student organizations, student government and cultural programs.
- 2. Counseling. Includes the cost of counselors' salaries and clerical support, plus operating expenses and equipment.
- 3. Testing. Covers the cost of test officers, psychometrists, clerical support, operating expenses and equipment.
- 4. Placement. Provides career information to students and faculty for academic program planning and employment information to graduates and students.
- 5. Financial Aids Administration. Includes the cost of the counseling and business services provided in connection with the financial aid programs.
  - 6. Health Services. Provides health services to students and covers the cost of salaries of medical officers and nurses and related clerical and technical personnel, as well as operating expenses and equipment.
  - 7. Housing. Supports personnel who provide housing information and monitor housing services available to students.
  - 8. Student Affairs Administration. Covers 50 percent of the cost of the office of the vice president for student affairs, which has responsibility for the overall administration of student services.

### Associated Students Fee

The law governing The California State University provides that a student body fee may be established by student referendum with the approval of two-thirds of those students voting. The Associated Students fee was established at California State University, Fullerton by student referendum in December 1959. The same fee can be abolished by a similar two-thirds approval of students voting on a referendum called for by a petition signed by ten percent of the regularly enrolled students (*Education Code*, Section 89300). The level of the fee is set by the Chancellor who may approve a fee increase only following a referendum approved by a majority of the students. The Associated Students fee supports a variety of cultural and recreational programs, child care centers and special student support programs.

# **Duplicate Degree Tuition**

Effective Fall '93 a duplicate degree tuition will be charged to any student who has earned a degree equivalent to or higher than the degree awarded by the program in which the student is enrolled. All students, new, continuing, and returning are subject to the duplicate degree tuition.

The Duplicate Degree Tuition will be charged at \$150.00 per unit not to exceed \$4,500.00 per academic year (\$2,250.00 per semester). This charge is in addition to the basic registration fees applicable to all students.

#### Miscellaneous Course Fees

For some courses an additional fee is collected for special course materials or, in the case of some music courses, for the use of a musical instrument. Students have the option of purchasing these items from another source if they choose to do so. For some laboratory courses a breakage fee is collected. The breakage fee is mandatory, but a portion or all of it is refundable at the end of the

semester depending on what breakage has occurred. The materials fees and breakage fees are paid separately from the registration fees at the Cashier's Office after classes begin. Notations are made by each course in the class schedule regarding the fee amount and individual footnotes explain the purpose of the fee.

# Average Annual Costs and Sources of Funds Per Full-Time Equivalent Student

The 20 campuses and the Chancellor's Office of The California State University are financed primarily through funding provided by the taxpayers of California. The total State appropriation to the CSU for 1992-93, including capital outlay and employee compensation increases, is \$1,741,478,000. The total cost of education for CSU, however, is \$2,112,024,000 which provides support for a projected 247,194 full-time equivalent (FTE) students.

The total cost of education in the CSU is defined as the expenditures for current operations, including payments made to the students in the form of financial aid, and all fully reimbursed programs contained in State appropriations, but excluding capital outlay appropriations. The average cost of education is determined by dividing the total cost by the total FTES. The average cost is further differentiated into three categories: State support (the State appropriation, excluding capital outlay), student fee support, and support from other sources (including federal funds).

Thus, excluding costs which relate to capital outlay (i.e., building amortization), the average cost of education per FTE student is \$8,544. Of this amount, the average student fee support per FTE is \$1,989. The calculation for this latter amount includes the amount paid by nonresident students.

# Source of Funds and Average Costs for 1992/93 CSU Budget (Projected Enrollment: 247,194 FTE)

rograms.		Average Cost Per			
	Amount	Student (FTE)	Percentage 119		
Total Cost of Education	\$2,112,024,000b	\$8,544	100.0		
State Appropriation	1,516,908,000°	6,137	Jee of heavel 71.8		
Student Fee Support	491,678,000	1,989 <sup>d</sup>	(100) 1000 0023.3		
Support from Other Sources	103,438,000	s) and 4 814 (all other fees) o	tion), 42814 (housing charge		

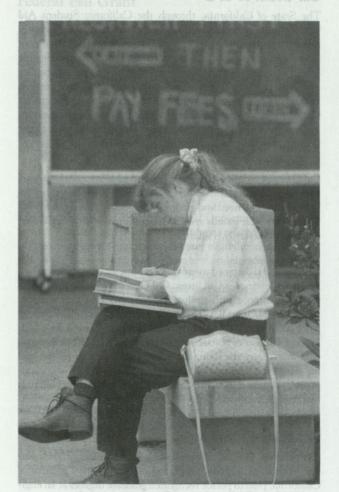
For budgetary purposes, full-time equivalent (FTE) translates total head count into total academic student load equivalent to 15 units per term. Some students enroll for more than 15 units; some students enroll for fewer than 15 units.

The total cost of education does not include the amount related to lottery and the capital investment of the CSU. The estimated replacement cost of all the system's permanent facilities and equipment on the 20 campuses is currently valued at \$6.5 billion, excluding the cost of land.

This figure does not include the capital outlay appropriation of \$224,570,000.

This figure does not include the capital outray appropriation of \$224,570,000.

The average costs paid by a student include the State University Fee, Application Fee, and Nonresident Tuition. Individual students may pay less than \$1,989 depending on whether they are part-time, full-time, resident or nonresident students.



# Financial Aid

Financial Aid refers to a wide variety of programs designed to assist students in meeting the cost of attendance at California State University Fullerton. These programs include gift aid in the form of scholarships and grants which do not require repayment or performance of work, student loans which require repayment over a period of time at a specified interest rate, and employment programs through College Work-Study or Student Assistance. The Emergency Loan program also provides students with resources to meet unusual or unexpected emergencies through a short-term loan.

Students who have specific questions regarding financial aid or who would like further information should contact the Financial Aid Office.

# Eligibility Requirements

The following eligibility requirements apply to all financial aid programs except emergency loans and scholarships.

To be considered eligible for most student assistance programs, the demonstration of financial need is one of the primary requirements. However, alternate forms of financial assistance such as scholarships, emergency loans, and parental loan programs should also be explored since many of these alternate sources of aid do not necessarily require the demonstration of financial need. Financial need is the difference between the reasonable and approved costs incurred by a student at CSUF and all of the resources available to the student, including contributions from parents, student (and spouse, if applicable), and other aid the student may be eligible to receive. The university uses a nationally accepted formula developed by the federal government in determining the family contribution. In addition to demonstrating financial need, all applicants for federal student financial assistance must meet the following eligibility requirements:

- 1. be a U.S. citizen or national or permanent resident of the U.S. Eligible students also include citizens of the Marshall Islands and permanent residents of the Trust Territories as well as other eligible non-citizens who can document their status in the United States as other than for a temporary purpose. Students should be aware that the citizenship requirements apply to all forms of federally-funded assistance but may differ for State supported grant programs and private scholarships;
- 2. be admitted to or enrolled on at least a half-time basis in a program of study leading to a degree, certificate or recognized credential offered by the institution. (Graduate students pursuing prerequisites required to gain admission to a graduate program may be eligible for limited loan eligibility);

- 3. maintain satisfactory academic progress in the course of study according to the standards and practices of the university;
- not be in default on any loan made from a student loan fund and not owe a refund on grants previously received for attendance at any college or university.
- complete a Free Application for Federal Student Aid (FAFSA) and submit all documentation requested by the Financial Aid Office; and
- 6. be registered for the Draft with the Selective Service or certify that he/she is not required to register.

# Scholarships & Institutional Grants

#### Scholarships

Scholarships and awards should not be viewed as merely another form of financial aid, even though many scholarships and awards do take financial need into consideration during the review process. They are given to honor outstanding achievement. Many scholarships are available to all students and are known as general scholarships; other scholarships have special objectives may be awarded to students pursuing selected majors, underrepresented students, students with certain career goals, or to those living in certain geographic areas.

Most scholarship applications are due the last Friday in February. Generally, the recipients are selected during the spring semester and the funds are awarded the next academic year. Full details regarding scholarship requirements and application deadlines are in the Scholarship and Awards Bulletin which is available the first week in December. The bulletins and applications can be picked up at the Financial Aid Office and all the Deans' Offices.

# Educational Opportunity Program Grant (EOPG)

The Educational Opportunity Program Grant of the California State University system is available to disadvantaged undergraduate students who are residents of California and who are officially enrolled in the EOP (contact the EOP Office for program enrollment procedures). EOP grants range from \$200 to \$1,000 per year for a total of five academic years.

### State University Grant (SUG)

The State University Grant is available for graduate and undergraduate students who are residents of California and who are enrolled in at least six units. All applicants who file a FAFSA will be considered for this grant. The maximum SUG for 1992/93 was \$1098 for undergraduates and graduates.

# State Grants Cal Grant A & B

The State of California, through the California Student Aid Commission, administers grant programs for undergraduates seeking a postsecondary education. To qualify for Cal Grant A or B, a student must be a California resident attending an eligible school or college within the State, must be making satisfactory academic progress, and must not owe a refund on any State or Federal grant or have defaulted on a student loan. Applicants for Cal Grant funds are required to complete a Free Application for Federal Student Aid (FAFSA) no later than March 2 prior to the fall semester for which the grant will be used.

Cal Grant A is designed to assist low and middle income students with the cost of tuition and fees. Recipients are selected on the basis of financial need and grade point average. During the 1992/93 academic year awards averaged approximately \$940 at California State University, Fullerton.

Cal Grant B is designed to provide very low income students with a living allowance. In addition, Cal Grant B recipients may also receive assistance with tuition and fee cost. First year students receiving Cal Grant B will generally receive a living allowance up to a maximum of \$1,196 for the academic year. During their 2nd, 3rd and 4th year of postsecondary education, Cal Grant B recipients will receive the living allowance in addition to tuition and fee assistance. During the academic year of 1992/93 the maximum Cal Grant B award at California State University, Fullerton was approximately \$2,136.

#### Graduate Fellowships

The Student Aid Commission awards approximately 500 Graduate Fellowships annually. Candidates must be a legal resident of California, plan to pursue recognized graduate degrees at an eligible California graduate school and must demonstrate their intent to become college or university faculty members. Teacher credential or certificate programs do not meet the requirements of the fellowship program.

The fellowships assist with tuition and fees at both independent and public colleges and universities. In 1992/93, awards averaged \$777 at California State University, Fullerton.

Applicants for Graduate Fellowship funds are required to complete a Free Application for Federal Student Aid (FAFSA) no later than March 2 prior to the fall semester for which the grant will be used. Applicants must also submit a Graduate Fellowship endorsement form to the Student Aid Commission no later than April 10. The endorsement form serves to demonstrate the student's intent to pursue a teaching career at the university or college level.

# Federal Programs

#### Federal Pell Grant

The Pell Grant program is the largest of all federal student grant programs and is the "foundation" of all forms of student assistance. Pell Grants are available to undergraduates who meet all eligibility requirements described earlier and who have not already obtained a bachelor's degree. The amount of the grant is based on financial need and ranged from \$400 to \$2,300 for students enrolled full-time during the 1993-94 award year. Parttime undergraduates are also eligible. Students may apply by completing a Free Application for Federal Student Aid (FAFSA).

#### Federal Supplemental Educational Opportunity Grant (SEOG)

The federal Supplemental Educational Opportunity Grant supplements other forms of financial assistance offered to an eligible student. Applicants must meet all other eligibility requirements. Although designed to meet the needs of undergraduate students with the greatest amount of need, SEOG funds are provided to schools and colleges by the federal government and awards to students are made according to the school's awarding practices. Priority in awarding SEOG funds must be given to Pell Grant recipients. During 1992-93, award amounts to CSUF students ranged from \$200 to \$1,000.

#### Federal Perkins Loans

Perkins Loans are low-interest federal loans (5 percent interest) available to undergraduate and graduate students. Based on their demonstrated financial need, students may borrow up to \$3,000 each academic year and up to a maximum borrowing limit of \$15,000 for completing an undergraduate degree. The combined borrowing limit for completion of undergraduate and graduate study is \$30,000. Students borrow through the Perkins Loan program at their school or college and availability of funds is dependent on repayment of the school's previous borrowers and annual federal allocations to the program. During the 1992-93 award year, loan amounts ranged from \$400 to \$1,000 at CSU Fullerton. Interest does not accrue on the loan and there is no repayment while the student is enrolled at least half-time. Repayment begins nine months following graduation, withdrawal, or enrollment below half-time status.

# Federal Work-Study

The College Work-Study program provides students with employment opportunities both on and off campus. Eligibility for the program is determined by the school or college based on the student's demonstrated financial need. Students awarded Work-Study receive an allocation of funds to be earned through parttime employment with an approved employer. The hourly wage will depend on the type of job and placement assistance is provided by the school or college. Students can take advantage of

this employment opportunity to work in areas related to their studies or career plan as well as to minimize their student loan borrowing. Undergraduates and graduate students are eligible to participate in the program.

#### Federal Stafford Student Loan

The Stafford Student Loan is a long-term loan made to students by banks, savings and loan associations and credit unions. The loans are guaranteed by the State of California and insured by the federal government. A season and palloure analysis federal government.

The federal government pays interest on the loan while the student is in school. Six months following graduation, withdrawal or less than half-time enrollment, borrowers begin repayments.

Effective October 1, 1992, new Stafford Student Loan borrowers will be required to repay the loan at a variable interest rate set annually. The interest rate will be based on the 91-day T-bill rate plus 3.10% and capped at 9%. Borrowers with outstanding loans made prior to October 1, 1992 will retain their previous interest rate during repayment.

Effective July 1, 1993, first year students will be eligible to borrow up to \$2,625 annually, second year students may borrow up to \$3,500, and other undergraduates will be limited to \$5,500 annually. Students enrolled in a program of study for less than one academic year will have their loan eligibility prorated based on the length of the program. The aggregate loan limit for an undergraduate will be \$23,000.

Beginning October 1, 1993, graduate students will be eligible to borrow up to \$8,500 annually with an aggregate borrowing limit of \$65,500 including undergraduate loans.

#### Federal Unsubsidized Stafford Student Loan

Students who do not demonstrate sufficient financial need to borrow under the regular Stafford Student Loan program may borrow under the unsubsidized Stafford Loan. Students may borrow within the loan limits and at the same interest rates as the regular Stafford loan program. With the exception of demonstrating financial need, borrowers must meet all eligibility criteria of the regular Stafford loan.

Borrowers will pay a combined origination and insurance premium of 6.5% which will be deducted from the loan checks. Interest payments must begin immediately after the loan is disbursed or may be added to the principal balance. Regular repayment begins six months after the borrower graduates or is no longer enrolled at least half-time. was l-bim at nonsolidate ha not soil

# Federal Supplemental Loans for Students (SLS)

The SLS is available to graduate, professional and independent undergraduate students. The SLS program is designed to assist students who do not qualify for other forms of financial assistance and who can meet the additional burden of loan payments.

Effective July 1, 1993, first and second year undergraduates will be eligible to borrow up to \$4,000 each academic year while other undergraduates may borrow up to \$5,000 each academic year. Students enrolled in a program that is less than one academic year will have their loan eligibility prorated. The aggregate loan limit for an undergraduate will be \$23,000. Graduate students will be eligible to borrow up to \$10,000 each academic year with an aggregate loan limit of \$73,000 including undergraduate SLS loans.

Repayment of the SLS loan begins within 60 days of receiving the loan. Borrowers who are enrolled at least half time in an eligible program may defer payment of principal and pay the interest only or may also defer the interest which will be added to principal loan balance.

#### Federal PLUS Parent Loans

The PLUS program is a loan designed to assist parents in meeting the educational costs of their dependent. The parent is the borrower and is responsible for repayment of the loan. The PLUS program is designed for families who generally do not qualify for other forms of financial assistance and who can meet the additional burden of loan payments.

Beginning July 1, 1993, parents who do not have an adverse credit history may be eligible to borrow up to the total cost of the student's education, minus any other financial aid received by the student. The PLUS interest rate is variable, up to a maximum interest rate of 10 percent. Repayment of the loan begins within 60 days of the disbursement of the loan. Parents must repay both interest and principal and should check with their lender concerning deferment options.

# **Application Periods**

The deadlines listed below are approximate and are subject to annual changes. Consult with the Financial Aid Office for current dates.

### **Emergency Loans**

Emergency loans are available from the first day of classes until 30 days before the end of the semester.

#### Scholarships

Applications for scholarships are due in the Financial Aid Office by late February. Students should contact the Financial Aid Office for an application in mid-January.

# Bureau of Indian Affairs Grants

Consult with the BIA for exact dates. The application deadline is usually in mid-June.

#### Stafford Loans (Formerly GSL)

Apply after June 1 for the fall semester and academic year, and after November 1 for the spring semester.

#### Cal Grants and Graduate Fellowships

First-time applicants must complete and mail the Free Application for Federal Student Aid (FAFSA) and the G.P.A. Verification Form by March 2.

#### Pell Grant only (no other aid desired)

Apply by May 1 of the academic year for which aid is desired.

#### All Other Aid

Priority is given to FAFSA applications mailed between January 1 and March 2 for the next academic year.

# Rights and Responsibilities of Students Receiving Aid

#### Rights

All students are entitled to and are guaranteed fair and equitable treatment in the awarding of financial aid. In addition, there shall be no discrimination of any kind. Appeals procedures exist for anyone who feels that a violation has occurred; consult with the director of financial aid for details.

All students have the right to receive full and open information about various financial aid programs and the status of their eligibility. In addition, they have the right to know the selection and review processes used in awarding financial aid.

All students have the right to know the costs of attending the institution, the refund policies in case of withdrawal from the university, the academic programs offered by the university, the faculty and physical facilities of the institution, and data regarding student retention at the university.

The following information concerning student financial assistance may be obtained from the Director of Financial Aid, McCarthy Hall LL-63, phone: (714) 773-3125:

- 1. student financial assistance programs available to students who enroll at CSU, Fullerton;
- the methods by which such assistance is distributed among recipients who enroll at CSU; Fullerton;
- 3. the means, including forms, by which application for student financial assistance is made and requirements for accurately preparing such application;

- 4. the rights and responsibilities of students receiving financial assistance; and
- 5. the standards the student must maintain to be considered to be making satisfactory progress for the purpose of establishing and maintaining eligibility for financial assistance.

The following information concerning the cost of attending California State University, Fullerton, is available from the Director of Financial Aid, McCarthy Hall LL-63, phone: (714) 773-3125:

- 1. fees and tuition (where applicable);
- 2. estimated costs of books and supplies;
- 3. estimates of typical student room and board costs and typical commuting costs; and
- 4. any additional costs of the program in which the student is enrolled or expresses of specific interest.

#### Responsibilities

All financial aid recipients agree to carry and complete a specific number of units each semester, report graduation or withdrawal from the university and to notify the Financial Aid Office of any changes in their financial or marital status, or unit load.

Recipients of financial aid must use the funds only to meet education costs. Any other use of the funds is prohibited by law.

Students who are receiving financial aid must maintain satisfactory academic progress. See the section below for details.

# Satisfactory Academic Progress Standards

The Higher Education Act, as amended, requires that students maintain satisfactory academic progress in the course of study they are pursuing according to standards and practices set by each college and university.

Students should be aware that these standards must be the same or stricter than the standards for a student enrolled in California State University, Fullerton in the same academic program who is not receiving assistance under a Title IV program.

#### Qualitative Standards (Measurement by Grades) whom a marker visiti liw amazon

All students, including financial aid recipients, must maintain scholastic academic progress as outlined in the California State University, Fullerton catalog.

Students are expected to complete their educational objective, degree, or certificate according to the following schedule:

Required for Degree	Max. Completed Units
Undergraduate: 124 units (B.A.)	150 (150A) (150A) (150A)
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30 or more depending	grind of 150 dienocean's respuis
upon program	

A student who cannot complete his/her objective within the maximum attempted units outlined above according to his/her degree standing will not be eligible for any financial aid from any federal or state source.

#### Successful Completion Requirement

In order to maintain satisfactory academic progress, each student must have a cumulative C average or an academic standing consistent with the institution's requirements for graduation by the end of the student's second academic year. This requirement is in addition to the requirement that a student maintain scholastic academic progress at the end of each semester as defined by California State University, Fullerton. Since California State University, Fullerton academic probation and disqualification standards permit a student to enroll on academic probation with a cumulative grade-point average of 1.86 or better with fewer than 60 semester units, the equivalent of the end of the student's second academic year, CSUF meets the provisions of the Higher Education Amendments of 1986. As a result, a student who maintains a 1.86 or better cumulative grade-point average at the end of the second academic year will be considered to be making satisfactory academic progress.

#### Semester Grade Review

Even though California State University, Fullerton will measure Satisfactory Academic Progress according to the number of units successfully completed at the end of each academic year, federal financial aid program regulations require each college and university to determine that a student is maintaining Satisfactory Academic Progress each payment period and each time it certifies a Stafford Loan or SLS. To meet this requirement, a student will have been certified as having made Satisfactory Academic Progress for payment purposes at the end of the fall semester if the student meets the "qualitative standards" as outlined above.

## Determination of Units Completed

The following grades will be counted in determining units successfully completed: A, B, C, D, CR (credit).

SP (Satisfactory Progress) and RD (Report Delayed) will be temporarily considered as units completed provided these designations are replaced with an acceptable final grade within one calendar year from the beginning date of the semester. If the final SP grade is not posted within one year, the student must submit a written appeal to the Financial Aid Office. If a Report is Delayed beyond one year, the student must submit to the Financial Aid Office a statement from the faculty member explaining the cause for the extended delay.

The following grades will count as units attempted but *will not* count as units completed: F, NC (No Credit), W (Withdrawal), AU (Audit), I (Incomplete), U (Unofficial Withdrawal).

If a grade is changed after the official posting for a semester, it is the student's responsibility to bring verification of the change to the Financial Aid Office.

Repeated Courses: A repeated course in which the student initially received a D or F will not count as units attempted or completed since an improved grade will only result in a grade change and not additional unit credit. A repeated course in which a student withdrew or received an unauthorized incomplete will count as units attempted and completed.

Remedial Courses will be considered as units completed for purposes of reviewing a student's Satisfactory Academic Progress only when the university or department requires a student to take a remedial course(s) as part of his/her program whether or not the student receives unit credit towards graduation.

# Failure to Maintain Satisfactory Academic Progress

A student who fails to maintain the qualitative or quantitative measurement standards will be defined as having failed to maintain Satisfactory Academic Progress and will be ineligible to receive any federal or state financial aid.

#### Reinstatement of Financial Aid Eligibility

Students whose financial aid eligibility has been terminated for failure to complete the minimum number of units may have their aid eligibility reevaluated when the deficit units are completed and the student has demonstrated capability of making satisfactory academic progress in accordance with the incremental completion rate.

#### Appeal

Students who fail to meet the Satisfactory Academic Progress standards and who are disqualified from financial aid eligibility may appeal their disqualification to the Director of Financial Aid by completing and submitting a written appeal within 10 days of receipt of the "Notification of Financial Aid Disqualification." No appeal will be approved unless the mitigating circumstance is unique and compelling, e.g., documented injury which prevented the student from attending classes, parental or spousal death, extended illness, etc.

The "Financial Aid Petition" is available in the Financial Aid Office.

#### Eligibility for Multiple Degrees

Students will be eligible to receive financial aid towards the completion of their first bachelor's degree and towards their first graduate degree.

# Refund Policy To any method to be ender and the

As stated in the appropriate CSUF Class Schedule, a student may be entitled to a refund of fees if he/she withdraws from the University or drops units. If a student received financial aid, fee refunds will be credited partially or completely to various financial aid accounts according to the formulas below:

Since financial aid is awarded to help meet educational costs, financial aid is considered to be used first for direct educational costs (fees). Therefore, if a student withdraws and is scheduled to receive a refund of fees, all or part of this refund will be used to reimburse the financial aid program(s) from which the student received funds.

If a student received financial aid in excess of direct fees, a repayment of additional financial aid funds may be required.

- I. Refund to be returned to Title IV programs:
  - A = Amount of fee refunded
- B = Total Title IV aid (excluding CWS) for semester Total aid awarded (excluding CWS) for semester.

A x B = Amount of refund to Title IV

- II. Distribution order of Title IV portion of refund among Title IV programs:
  - 1. Perkins (not to exceed the amount disbursed)
  - 2. SEOG (not to exceed the amount disbursed)
  - 3. PELL (not to exceed the amount disbursed)
  - 4. Stafford (not to exceed the amount disbursed)
  - 5. SLS (not to exceed the amount disbursed)
- III. When the Stafford is the only Title IV aid received (excluding CWS) the following distribution formula will be used:

Refund to Stafford = Amount of Stafford Estimated cost of attendance for loan period

- IV. Any remaining refund amount not credited to Title IV programs as per the above formulas will be distributed as follows:
- 1. EOPG (not to exceed the amount disbursed)
  - 2. SUG (not to exceed the amount disbursed)
  - 3. Student (remaining amount of refund)

Disclaimer: Federal legislation governing the federal student aid programs will likely result in a modification to the current refund policy and distribution order of funds returned to the federal student aid programs. Any modification to the current refund policy was still pending at the time of printing. Students may check with the Financial Aid Office for current information on the refund policy.

# Repayment Policy

Since financial aid is awarded to help meet educational costs, financial aid is considered to be used first for direct educational costs (fees). Therefore, if a student withdraws and is scheduled to receive a refund of fees, all or part of this refund will be used to reimburse the financial aid program(s) from which the student received funds.

If a student received financial aid in excess of direct fees, a repayment of additional financial aid funds may be required.

Students who receive financial aid and later terminate their enrollment by dropping out or by withdrawing and who received cash disbursements of Title IV financial aid for payment of their non-institutional costs require institutional review to determine if there has been an overpayment, and therefore, if a repayment is required. Repayment designates the amount that a student must repay of the funds he/she received in cash that could not have reasonably been spent for non-institutional costs during the portion of the term that the student was enrolled.

Total Title IV funds disbursed in cash to the student minus Stafford, SLS, CWS minus non-institutional costs paid by the student from the disbursement for the portion of the payment period during which the student was enrolled (room, board, books, supplies, transportation, miscellaneous expenses) = overpayment.

Overpayment X Total amount of Title IV (minus CWS, Stafford, SLS) ÷ Total amount of aid (minus CWS, Stafford, SLS) = Title IV Repayment

Order of distribution for repayment: Perkins, SEOG, then Pell.

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# University Regulations

Each student is responsible for meeting the requirements printed in the university catalog and all published regulations of the university.

The university establishes certain academic policies and requirements which must be met before a degree is granted. These include major and unit requirements and prerequisites. While advisors, directors, deans and faculty will provide a student with information and advice, responsibility for meeting these requirements rests with the student. Since failure to satisfy these requirements may result in the degree being withheld, it is important for each student to become thoroughly acquainted with all regulations. The catalog and the semester class schedule, available in the Titan Bookstore, are the best sources of information on current policy and regulations.

The student also has the responsibility for securing the consent of the instructor before enrolling in a course with prerequisites that the student has not completed.

To ensure receipt of timely information and accurate grade reports from the university, each student must keep the Office of Admissions and Records informed of changes in personal data, including changes in name, address and program of study. Enrollment corrections and changes must be reported to the registrar by the 20th day of classes each semester, using Change of Program forms. Between the 15th and 20th day of classes, a \$20 administrative late fee will be required to make such changes. Other corrections should be reported on forms provided by and returned to the Office of Admissions and Records.

# **Enrollment Regulations**

### Unit of Credit

Each semester unit represents three hours of university work per week for one semester. Courses are of three types:

Lecture: one hour in class plus two hours of study. Activity: two hours of class plus one hour of study. Laboratory: three hours of laboratory activity in class plus one hour of study outside class.

Some courses may combine two or more of these types. All required courses carry unit credit.

### Class Levels

Undergraduate students who have completed 0-29 semester units of work are classified as freshmen, 30-59 semester units as sophomores, 60-89 semester units as juniors, and 90 or more as seniors.

#### Maximum Number of Units

Undergraduate students' requests to enroll for more than 19 units must be approved by the student's advisor and the department chair of the major. If such requests are denied, appeals may be made to the appropriate school dean. (Undeclared majors must receive the approval of the coordinator of undergraduate studies.) The minimum full-time program is 12 units.

A student whose academic record justifies a study list in excess of the normal may request to be allowed to enroll for extra units. Request forms may be obtained from the Office of Admissions and Records. In general, only students with superior academic records are allowed to enroll for more than the maximum. In addition, the need to enroll for the extra study must be established. Factors such as time spent in employment or commuting, the nature of the academic program, extracurricular activities and the student's health should be considered in planning a study program. Students who are employed or have outside responsibilities are advised to reduce their program of study.

The minimum and maximum units of a full-time program of study for graduate students are defined in the "Graduate Regulations" section of this catalog.

# Graduate Level Courses

Graduate level (500) courses are organized primarily for graduate students. Undergraduate students may be permitted to enroll in a graduate level course if:

a. they have reached senior status (completed a minimum of 90 semester units)

- b. have the academic preparation and prerequisites required for entry into the course overy student of the university will have all course work eva
- c. gain the consent of the instructor.

Students wishing to use 500-level coursework taken during their undergraduate degree toward a master's degree should read the section on postgraduate credit in the "Graduate Regulations" section of this catalog.

#### Class Attendance

While class attendance is not recorded officially by the university, regular attendance in class is often essential to success in a course. The policy on class attendance is within the discretion of the individual faculty member and shall be announced by the faculty member at the first class meeting of the semester.

# **Initial Class Meeting**

It is especially important that students attend the first meeting of a class. Students absent from the first meeting and who fail to notify the instructor or departmental office no later than 24 hours after the class meeting may be denied admission to the class. Instructors may deny admission to absentees to admit persons on waiting lists. Majarbe meries awast daiw to estudy relucioned

# Instructor-Initiated Drops

A student who registers for a class and whose name appears on the first-day-of-class list should attend all class meetings in the first week. If the student is absent without notifying the instructor or departmental office within 24 hours after any meeting missed during that week, the student may then be dropped administratively from the class by the instructor; however, ultimately it is the student's responsibility to ensure that he/she has been dropped from the class and if not, to follow the appropriate procedures for withdrawing from the class. An instructor may also administratively drop a student who does not meet prerequisites for the course. These administrative withdrawals shall be without penalty and must be filed by the instructor with the registrar no later than the end of the second week of instruction (the specific date is published in the class schedule each semester).

# Grading Policies

# Grading System

Every student of the university will have all course work evaluated and reported by the faculty using letter grades or administrative symbols.

The university uses a combination of traditional and nontraditional grading options as follows:

#### Traditional

Option 1. Letter grades, defined as:

A — outstanding performance

B — above average performance

C — average performance

D — below average performance, though passing

F — failure

# Nontraditional Meeting Market

Option 2. CR (Credit) for satisfactory (equivalent to C or better in undergraduate courses; B or better in graduate courses) and NC (No Credit) for less than satisfactory work.

When, because of circumstances, a student does not complete a particular course, or withdraws, certain administrative symbols may be assigned by the faculty. Grades and symbols are listed in a chart on the following page together with grade-point values. The chart also illustrates the academic bookkeeping involved for all grades and symbols used.

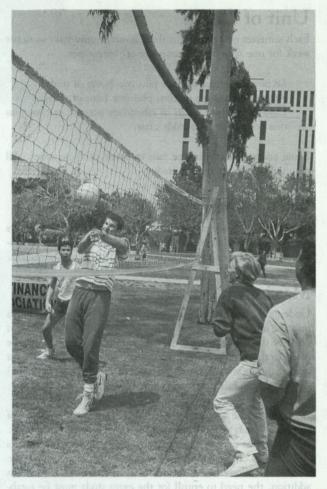
# Selection of Grading Option

Selection of a grading option, with certain exceptions, is the responsibility of the student. Graduate students must use Option 1 for courses that are on study plans leading to master's degrees. Undergraduates must use Option 1 for major, minor and general education requirements. In som totoment and easily and more

Exceptions are those courses designated by the faculty to be graded solely on either an Option 1 or Option 2 basis.

These courses will be so designated in the class schedule (and shall not be changed by the faculty after publication of the class schedule) for each semester and may be included in major, core or special program requirements.

Students shall inform the registrar up to the end of the third week of classes regarding the selection of grading options in designated courses. If a student does not do so, Option 1 will be used.



The faculty shall grade all students using the traditional A, B, C, D or F grades except in Credit/No Credit courses, and the registrar shall make the necessary changes from A, B, C, D or F, converting A, B, C to Credit, and D and F to No Credit in undergraduate courses and A, B to Credit, and C, D and F to No Credit in graduate courses. In those courses offered only on a Credit/No Credit basis, the instructor shall assign grades of CR or NC or appropriate administrative symbols.

#### Nontraditional Grade Option

A nontraditional grading option is available to undergraduate students, nonobjective graduate students and to classified graduate students for courses not included in the approved study plan. Any student attempting a course using the nontraditional grading option must meet the prerequisites for that course. Each student shall be permitted to select courses in subjects outside of the major, minor and general education requirements for enrollment on a Credit/No Credit basis (grading Option 2). The phrase "major requirements" shall be taken to include core plus concentration (or option) requirements in departments using such terms, and professional course requirements in teacher education curricula. A student in any one term may take one course under Option 2. In addition, he or she may enroll in a required course offered only under Option 2; however, a maximum of 36 units of Credit/No Credit courses, including those transferred from other institutions, may be counted toward the baccalaureate.

Under Option 2 the term "Credit" signifies that the student's academic performance was such that he or she was awarded full credit in undergraduate courses with a quality level of achievement equivalent to a C grade or better. In all graduate level and professional education courses Credit signifies academic performance equivalent to B or A grades. No Credit signifies that the student attempted the course but that the performance did not warrant credit toward the objective. instructor, provided that entailment in any course as an audito

Ordinarily, a student shall be limited to one nonmajor course per term using this option, exclusive of courses offered only on a Credit/No Credit basis.

When an undergraduate student changes his or her major field of study to one where he or she has completed courses with CR grades, such lower division courses shall be included in major requirements. Upper division courses may be included at the option of the department upon petition by the student.

ADVISORY CAUTION: Undergraduate students who plan to pursue graduate or professional studies later are advised to be selective in opting for courses on a credit/no credit basis. As a general rule (advisory only), course work that is preparatory or prerequisite to advanced specialized study should be completed and evaluated on a letter grade basis and not Credit/No Credit.

Grade or Symbol	Units	Units	Grade Point	Full
Option 1	Attempted	Earned	Value	Credit
A	Yes	Yes	4	Yes
В	Yes	Yes	3	Yes
C	Yes	Yes	2	Yes
D	Yes	Yes	1	No
F	Yes	No	0,0	No
Option 2				
CR	from the co	Yes	None	Yes
NC	re. The chail			No
Administrative Symbols I (Incomplete				
authorized) U (Unauthorized	de in planes	No		
incomplete)	Yes	No	0	No
W (Withdrawal)	No	No	None	No
WF (Withdraw-			ete orade'ı	
al)††	Yes	No	0	No
AU (Audit) SP (Satisfactory	No	No	None	No
progress)	1 20 No	No	None	No
RD (Report				
delayed)	No	No	None	No
TOTALS	Used	Counted	Used	
	In	in in	Toward	
	GPA	Objective	GPA	

<sup>\*</sup>Credit/No Credit course units are not included in GPA computations. †If not completed within one semester the I will be changed to an F (or NC). ††Effective fall 1991, this symbol is no longer assigned.

# Administrative Symbols Incomplete Authorized (I)

The symbol I signifies that a portion of required course work has not been completed and evaluated in the prescribed time period owing to unforeseen but fully justified reasons and that there is still a possibility of earning credit. It is the responsibility of the student to bring pertinent information to the instructor and to reach agreement on the means by which the remaining course requirements will be satisfied. A final grade is assigned when the work agreed upon has been completed and evaluated.

An Incomplete must be made up during the semester immediately following the end of the term in which it was assigned. This limitation prevails whether or not the student maintains continuous enrollment. Failure to complete the assigned work will result in an Incomplete being changed to an F or an NC.

A grade of Incomplete may be given only when, in the opinion of the instructor, a student cannot complete a course during the semester of enrollment for reasons beyond the student's control.

Such reasons are assumed to include: illness of the student or of members of the student's immediate family, extraordinary financial problems, loss of outside position and other exigencies. In assigning a grade of I, the instructor shall file with the department for future reference and student access a Statement of Requirements for Completion of Course Work. The requirements shall not include retaking the course. The instructor will also designate a time limit (up to one semester) for completing reguirements. Upon request, a copy of the document will be furnished to the student. The student should review this statement at the earliest opportunity.

The statement of requirements will include an indication of the quality of the student's work to date. This not only provides an interim evaluation for the student but assists the department chair in assigning a final grade in those instances where the instructor is no longer available.

When the specific requirements are completed, the instructor will report a change of grade. The responsibility for changing the incomplete grade rests with the instructor.

#### Withdrawal (W)

Students may withdraw from class during the first two weeks of instruction. After that time students should complete all courses in which they are enrolled.

The university authorizes withdrawal after the first two weeks of instruction and prior to the last three weeks of instruction only with the approval of the instructor and the department chair (and, in some cases, the school dean). All requests for permission to withdraw and all approvals shall be made in writing on the Change of Program form and shall be filed at the Office of Admissions and Records by students or their proxies.

Prior to the 20th day of instruction, students may withdraw from classes without record of enrollment. After the 20th day of classes, students should complete all courses in which they are enrolled. Authorization to withdraw after census shall be granted for only the most serious reasons i.e. a physical, medical, emotional or other condition which has the effect of limiting the student's full participation in the class. Such reasons must be documented by the student. Poor academic performance is not evidence of a serious reason for withdrawal. Signatures of the instructor and department chair are required for each course. In some departments, the signature of the associate dean is also required. Withdrawal from a class is signified by a grade of "W". Such grades are not included in grade point average calculations.

Students may not withdraw during the final three weeks of instruction except in cases, appropriately documented, such as accident or serious illness, where the assignment of an Incomplete is not practicable. Ordinarily, withdrawals of this nature will involve withdrawal from all classes except that Credit or Incomplete Authorized (I) may be assigned for courses in which students have completed sufficient work to permit an evaluation to be made. Requests for permission to withdraw from all classes under these circumstances, with authorizations as described above, shall be submitted with Change of Program forms by the students (or their proxies) to the registrar.

#### Unauthorized Incomplete (U)

The symbol U indicates that an enrolled student did not withdraw from the course but failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible. For purposes of grade-point average computations this symbol is equivalent to an E.

Students may petition for retroactive withdrawal from individual courses or from an entire semester, provided they can document both the serious and compelling reasons or circumstances that required the withdrawal and the date of such withdrawal. Such a petition must be filed within 30 days after the first class day of the following semester.

ADVISORY NOTE: Students who unofficially withdraw and who are receiving financial aid or benefits which are dependent on completion of specified course units are advised that they may have such benefits suspended and may be subject to repayment of allowances received after date of unofficial withdrawal.

#### Audit (AU)

The symbol AU is used by the registrar in those instances where a student has enrolled in a course either for information or other purposes not related to the student's formal academic objective. Enrollment as an auditor is subject to the permission of the instructor, provided that enrollment in any course as an auditor shall be permitted only after students otherwise eligible to enroll in the course on a credit basis have had an opportunity to do so. Auditors are subject to the same fees as credit students and regular class attendance is expected. Once enrolled as an auditor, a student may not change to credit status unless such a change is requested prior to the last day to add classes. A student who is enrolled for credit may not change to audit after the third week of instruction. An auditor is not permitted to take examinations in the course; therefore, there is no basis for evaluation nor a formal grade report.

### Satisfactory Progress (SP)

The SP symbol is used in connection with thesis, project or similar courses that extend beyond one academic term. It indicates that work is in progress, and has been evaluated and found to be satisfactory to date, but that assignment of a final grade must await completion of additional course work. Cumulative enrollment in units attempted may not exceed the total number

applicable to the student's educational objective. Work is to be completed within a stipulated period which may not exceed one year except for graduate degree theses or projects for which the time may be longer, but may not exceed the overall limit for completion of all master's degree requirements. Any extension of time must receive prior authorization by the dean of the school (or the dean's designee) in which the course is offered.

#### Report Delayed (RD)

The RD symbol is used where a delay in the reporting of a final grade is due to circumstances beyond the control of the student. The symbol is assigned by the registrar and will be replaced as soon as possible. An RD shall not be included in calculation of a grade-point average.

## Student Records

#### Grade Reports to Students

A report of the final grades assigned in classes is sent to each student at the end of each semester. Many students also leave self-addressed post cards for instructors of specific courses to send them earlier reports.

#### Class Grade-Point Averages

Beginning with the fall semester 1978, information is included on student grade reports and permanent academic records that is intended to depict the level of achievement of students in relation to other students in a particular class. The information is displayed in parentheses before each course grade. The first set of figures indicates the number of students officially completing the course and the second set is the class grade-point average. In making the computations, marks of W,I, CR, NC, and SP are excluded. This same information is displayed for summer session classes, but not for extension or intersession classes sponsored by the Office of Extended Education. The best and to the standard

#### Examinations

Final examinations, if required by the instructor, will be given at times scheduled by the university. Once established, the final examination schedule may not be changed unless approved by the dean of the school. No makeup final examination will be given except for reason of illness or other verified emergencies.

## Credit by Examination

Students may be granted credit toward the baccalaureate and to meet curriculum requirements in certain designated courses by the satisfactory completion of challenge examinations in the courses. The examinations are to be comprehensive and administered by the sponsoring departments. Well in advance of the semester in which a challenge examination is to be administered, the student, using the appropriate university form, will secure written approval of his or her major advisor and the chair of the department in which the course is offered. In general, prior work or academic experience will be required.

Courses to be offered as challenge examinations will be determined by the academic departments. Matriculated students may either enroll in these courses during registration or add them during the first three weeks of the semester. The examination must be administered not later than the end of the third week of instruction.

Upon successful completion of the examination, the instructor will report the grade of CR. Students who fail the challenge examination may elect to continue the course for credit or may officially withdraw from the course through the normal class withdrawal procedure. The challenge examination for any course may be administered only once.

A maximum of 30 credits can be earned by challenge examination, including those earned by advanced placement. Credit by examination may not be used to fulfill the minimum residence requirements.

#### Grade-Point Averages | Hards and on State Lane (4) share

The numerical grade-point values in the grading system chart are intended to give an exact determination of a student's scholastic standing. To compute the grade-point average for course work at Fullerton, the grade-point value of each grade, with the exception noted in the "Repetition of Courses" section, is multiplied first by the unit value of each course to obtain a total of all grade points earned. The total is then divided by the total units attempted in all courses in which grades of A, B, C, D, F, U and WF were received. The resulting figure is the grade-point average.

## Repetition of Courses

Undergraduate students may repeat courses at California State University, Fullerton for which D or failing grades were earned either at Cal State Fullerton or at other institutions; in repeating such courses, the traditional grading system shall be used. In computing the grade-point average of a student who repeats courses in which he or she received D or failing grades, only the most recently earned grades and grade points shall be used for the first 16 units repeated. Nevertheless, the original grade on the academic record shall not be changed or eradicated.

In exercising this option, an undergraduate student must repeat the course at Cal State Fullerton and may request application of this policy when a course has been repeated. This should be accomplished using the appropriate form, immediately following the term in which the course has been completed, so that the student's gradepoint average can be revised. In the absence of student requests, courses successfully repeated are routinely credited by the Office of Admissions and Records during disqualification cycles and degree requirement reviews at the time of graduation.

This policy may also be applied to courses in which U or WF grades were assigned, as a means of eliminating such marks from grade-point average computations.

In the case of any repetition beyond the 16-unit limit or in courses for which a C or better grade was awarded, both grades are considered in computing grade-point averages. Successful repetition of a course originally passed carries no additional unit credit toward a degree or credential except for certain courses such as independent study, practicum, or other courses specified in this catalog as "may be repeated for credit."

Students transferring from other colleges where courses were taken and repeated may be eligible for consideration under this policy. In general, the policy of the college where the course was repeated shall be followed; however, units for the courses taken and repeated at the transfer institution are included in the 16unit limitation.

Subject to the following restrictions, if a graduate or postbaccalaureate student (excluding students with a second bachelor's degree objective) repeats courses for which a grade of U (unauthorized incomplete) was received, only the most recently earned grade(s) and grade points shall be used in computing the grade point average; however, the original U grade(s) will remain on the permanent record. This policy may be applied only to grades earned during the first semester in which U grades are received. Repeated courses must be taken at Cal State Fullerton using the traditional grading system. Students who have successfully repeated U-graded courses must notify the Admissions and Records office using the appropriate form if they wish adjustment to their grade point averages.

#### **Grade Changes**

The university recognizes the long-standing prerogatives of faculty to set standards of performance and to apply them to individual students. The university will seek to correct injustices to students but at the same time believes that the instructor's judgment at the time the original grade is assigned is better than a later reconsideration of an individual case. Equity to all students is of fundamental concern. The following policies apply to changes of grades except for changes of Incomplete Authorized and Unauthorized Incomplete symbols.

- 1. In general, all course grades are final when filed by the instructor in the end-of-term course grade report. Each student is notified by mail of the grades earned during the term, and these grades become a part of the official record.
- 2. A change of grade may occur only in cases of clerical error, administrative error, or where the instructor reevaluates the original course assignments of a student and discovers an error in the original evaluation. A clerical error is an error made by the instructor or an assistant in calculating or recording the grade. A change of grade shall not occur as a consequence of the acceptance of additional work or reexamination beyond the specified course requirements.

- 3. A request for a change of grade shall be initiated by the student affected and shall be directed to the instructor within 60 calendar days of the first day of classes of the regular semester following the award of the original grade. If the instructor determines that there is a valid basis for the change, a Change of Grade form shall be used to notify the Office of Admissions and Records. These forms are available in department offices and are not to be handled by students. If the instructor determines that there is not a valid basis for the change, and denies the student's request, the instructor's decision is final. The student may file a petition with the Academic Appeals Board on the basis of capricious or prejudicial treatment by the instructor.
- 4. The Change of Grade form completed and signed by the instructor, noting the basis for the change, shall not be accepted by the registrar unless approved separately by the department chair and school dean.
- 5. If a request for change of grade is initiated after 60 calendar days into the following semester, it will be approved only in extraordinary circumstances. An explanation of such circumstances must accompany the request and must be approved separately by the instructor, department chair, and the dean before acceptance by the registrar.

#### Academic Dishonesty

Academic dishonesty includes such things as cheating, inventing false information or citations, plagiarism, and helping someone else commit an act of academic dishonesty. It usually involves an attempt by a student to show possession of a level of knowledge or skill which he or she does not possess.

Cheating is defined as the act of obtaining or attempting to obtain credit for work by the use of any dishonest, deceptive, fraudulent or unauthorized means. Examples of cheating include, but are not limited to: using notes or aids or the help of other students on tests and examinations in ways other than those expressly permitted by the instructor, plagiarism as defined below, tampering with the grading procedures, and collaborating with others on any assignment where such collaboration is expressly forbidden by an instructor.

Plagiarism is defined as the act of taking the specific substance of another and offering it as one's own without giving credit to the source. When sources are used, acknowledgment of the original author or source must be made following standard scholarly practice.

The initial responsibility for detecting and dealing with academic dishonesty lies with the instructor concerned. An instructor who believes that an act of academic dishonesty has occurred is obligated to discuss the matter with the student involved. The instructor should possess reasonable evidence, such as documents or personal observation. However, if circumstances prevent consultation with the student, the instructor may take whatever action, subject to student appeal, the instructor deems appropriate.

An instructor who is convinced by the evidence that a student is guilty of academic dishonesty shall:

- 1. Assign an appropriate academic penalty. This may range from an oral reprimand to an F in the course. To the extent that the faculty member considers the academic dishonesty to manifest the student's lack of scholarship and to reflect on the student's academic performance and academic integrity in a course, the student's grade should be adversely affected. Suggested guidelines for appropriate actions are an oral reprimand in cases where there is reasonable doubt that the student knew that his or her action constituted academic dishonesty; an F on the particular paper, project or examination where the act of dishonesty was unpremeditated, or where there were significant mitigating circumstances, or an F in the course where the dishonesty was premeditated or planned.
- Report to the student involved, to the department chair, and to the vice president for student affairs the alleged incident of academic dishonesty, including relevant documentation, and make recommendations for action that he or she deems appropriate.

The vice president for student affairs shall maintain an academic dishonesty file of all cases of academic dishonesty with the appropriate documentation. Students shall be informed when their names are inserted into the file and provided with copies of any appeals or disciplinary procedures in which they may become involved. The vice president for student affairs or his or her designees may initiate disciplinary proceedings under Title 5, California Code of Regulations, Section 41301, and Chancellor's Executive Order 148; when two or more incidents involving the same student occur, he or she shall do so. Opportunities for appeal regarding sanctions resulting from disciplinary proceedings are provided by Executive Order 148.

A student may appeal any action taken on a charge of academic dishonesty under the University Policy Statement 300.030, "Academic Appeals." If the Academic Appeals Board decides that a student is innocent of academic dishonesty, then no entry shall be made in the academic dishonesty file.

If the Academic Appeals Board decides either that a student is innocent of academic dishonesty, or that a faculty member has acted arbitrarily or capriciously towards a student, it shall instruct the faculty member to meet with his or her department chair and, if appropriate, the dean of the school for the purpose of reassessing the student's performance. If the faculty member refuses to do so, or if the Board's recommendation does not specify a particular grade as the one to be assigned, the matter shall be referred to an ad hoc committee, to be established by the department, which shall have ultimate authority to act in the case.

#### Academic Renewal

Under certain circumstances, the university may disregard up to two semesters or three quarters of previous undergraduate course work taken at any college or university from all considerations associated with requirements for the baccalaureate. These circumstances are:

- that the student has requested the action formally and has presented evidence that work completed in the terms under consideration is substandard and not representative of present scholastic ability and level of performance; and
- 2. that the level of performance represented by the terms under consideration was due to extenuating circumstances; and
- that there is every evidence that the student would find it necessary to complete additional terms to qualify for the baccalaureate if the request were not approved.

Final determination that one or more terms shall be disregarded in the determination of eligibility for graduation shall be based upon a careful review of evidence by the Review Committee for Academic Renewal and shall be made only when:

- 1. five years have elapsed since the most recent work to be disregarded was completed; and
- 2. the student has completed at Fullerton, since the most recent work to be disregarded was completed, 15 semester units with at least a 3.0 grade-point average, or 30 semester units with at least a 2.5 GPA, or 45 semester units with at least a 2.0 GPA. Work completed at another institution cannot be used to satisfy this requirement.

When such action is taken, the student's permanent academic record shall be annotated so that it is readily evident to all users of the record that no work taken during the disregarded terms, even if satisfactory, may apply toward baccalaureate requirements. All work must remain legible on the record ensuring a true and complete academic history.

This policy is not intended to merely allow students a means by which they may improve their overall grade-point averages.

### Transcripts

Official transcripts of courses taken at the university are issued only with the written permission of the student concerned. Partial transcripts are not issued. A fee of \$4 for each transcript must be received before the transcript can be released.

Normally, transcripts are available within three working days, except at the end of the semester when the student should allow about 10 days after the last day of the semester.

Transcripts from other institutions, which have been presented for admission or evaluation, become a part of the student's permanent academic file and are not returned or copied for distribution. Students desiring transcripts covering work attempted elsewhere should request them from the institutions concerned.

## Continuous Residency Regulations

## Good Standing

Good standing indicates that a student is eligible to continue and is free from financial obligation to the university. A student under academic disqualification, disciplinary suspension or disciplinary expulsion is not eligible to receive a statement of good standing on transcripts issued by the university or on other documents.

## Choice of Requirements

A student remaining in continuous attendance in regular sessions and continuing in the same curriculum at any campus of the California community colleges or in any combination of California community colleges and campuses of The California State University may, for purposes of meeting graduation requirements, elect to meet the graduation requirements of such campuses from which he or she will graduate in effect either at the time of entering the curriculum or at the time of graduation therefrom, except that substitutions for discontinued courses may be authorized or required by the proper university authorities.

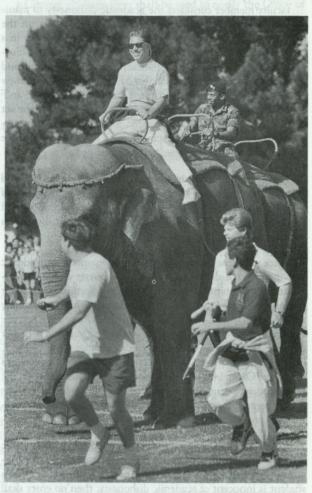
## Stop-Out Policy

With certain exceptions, undergraduate students and postbaccalaureate unclassified students may be absent for one semester and maintain their continuing student status. This includes election of curriculum requirements for graduation and eligibility to register for the next semester. The exceptions are as follows:

Disqualified Students — Students who are disqualified at the end of a semester and have not been reinstated will not receive registration materials; they must apply for readmission, and if admitted, may be subject to new curriculum requirements.

Foreign-Visa Students — Students with foreign visas are required to maintain continuous enrollment. The stop-out policy is not applicable.

Students absent for more than one semester must apply for readmission should they wish to return to Fullerton. In some cases, however, election of catalog requirements will not be jeopardized for certain students. Students should consult an evaluator in the Office of Admissions & Records.



## Leave of Absence

A leave of absence may be granted based on certain documented extenuating circumstances and normally is granted for not more than one year.

Such an approved leave of absence authorizes the student to return without reapplying to the university and continue under the catalog requirements that applied to the enrollment prior to the absence.

Undergraduate and postbaccalaureate unclassified graduate students on approved leaves of one year (two academic semesters) or less are eligible to register for the semester immediately following the end of the leave and will be mailed registration materials automatically.

The leave of absence policy for conditionally classified and classified graduate students and credential students is defined in the "Graduate Regulations" section of this catalog.

## Withdrawal from the University

A student who wishes to withdraw from the university during a semester must complete a Change of Program form and obtain the required approvals. See the section on refund of fees for possible refunds. No student may withdraw after the date shown on the university calendar as the last day of instruction. Complete withdrawal from the university is accomplished by following the procedures for dropping classes.

## Retention, Probation and Disqualification

For purposes of determining a student's ability to remain in the university both quality of performance and progress towards the educational objective will be considered.

#### Academic Probation

An undergraduate student shall be placed on academic probation if in any semester the cumulative grade-point average or the grade-point average at Fullerton falls below 2.0 (grade of C on a four-point scale). The student shall be advised of probation status promptly and, except in unusual instances, before the start of the next consecutive enrollment period.

An undergraduate student shall be removed from academic probation and restored to clear standing upon achieving a cumulative grade-point average of 2.0 in all academic work attempted, in all such work attempted at Fullerton, and is making satisfactory progress towards his or her educational objective.

A postbaccalaureate student (credential, unclassified or undeclared status but not second baccalaureate degree students) shall be subject to academic probation if after completing 12 or more units his or her postbaccalaureate cumulative grade-point average for units attempted at California State University, Fullerton falls below a 2.50 average. The GPA will determine whether a student is subject to probation only after the student has completed 12 semester units.

A graduate student enrolled in a graduate degree program in either conditionally classified or classified standing shall be subject to academic probation if he or she fails to maintain a cumulative grade-point average of at least 3.0 (grade of B on a four-point scale) in all units attempted.

#### Academic Disqualification

An undergraduate student on academic probation shall be subject to academic disqualification if:

- as a lower-division student (fewer than 60 semester units of college work completed) he or she falls 15 or more grade points below a 2.0 average on all college units attempted or in all units attempted at this institution; or
- 2. as a junior (60 to 89½ semester units of college work completed) he or she falls nine or more grade points below a 2.0 average on all college units attempted or in all units attempted at this institution; or
- 3. as a senior (90 or more semester units of college work completed) he or she falls six or more grade points below a 2.0 average on all college units attempted or in all units attempted at this institution.

A graduate student enrolled in a graduate degree program shall be subject to disqualification if while on probation sufficient grade points are not achieved to remove probationary status. Disqualification may be either from further registration in a particular program or from further enrollment in the university, as determined by appropriate campus authority.

A postbaccalaureate student who is on probation shall be subject to disqualification if he or she fails to earn at least a 2.50 grade-point average each term after the completion of 12 units at California State University, Fullerton in postbaccalaureate status. Disqualification may be either from further registration as a postbaccalaureate, credential or certificate program student or from enrollment at California State University, Fullerton, as determined by the vice president for academic affairs or designee.

### Student Conduct

The university properly assumes that all students are in attendance to secure a sound education and that they will conduct themselves as mature citizens of the campus community. Compliance with all regulations of the university is therefore expected. If, however, on any occasion a student or an organization is alleged to have compromised accepted university standards, ap-

propriate judiciary procedures shall be initiated through the established university process. Every effort will be made to encourage and support the development of self-discipline and control by students and student organizations. The vice president for student affairs, aided by members of the faculty, is responsible to the president of the university for the behavior of students in their relationships to the university. The president in turn is responsible to the chancellor and the trustees of The California State University, who themselves are governed by specific laws of the State of California.

Students have the right to appeal certain disciplinary actions taken by appropriate university authorities. Regulations governing original hearings and appeal rights and procedures have been carefully detailed to provide maximum protection to both the individual charged and the university community.

If the issue cannot be resolved informally, students should consult with the coordinator of academic appeals.

Inappropriate conduct by students or by applicants for admission is subject to discipline as provided in Sections 41301 through 41304 of Title 5, Code of Regulations. These sections follow.

#### Article 1.1, Title 5, California Code of Regulations

41301. Expulsion, Suspension and Probation of Students. Following procedures consonant with due process established pursuant to Section 41304, any student of a campus may be expelled, suspended, placed on probation or given a lesser sanction for one or more of the following causes which must be campus-related:

- Cheating or plagiarism in connection with an academic program at a campus.
- (b) Forgery, alteration or misuse of campus documents, records, or identification of knowingly furnishing false information to a campus.
- Misrepresentation of oneself or of an organization to be an agent of a campus.
- (d) Obstruction or disruption, on or off campus property, of the campus educational process, administrative process, or other campus function.
- Physical abuse on or off campus property of the person or property of any member of the campus community or of members of his or her family or the threat of such physical
- (f) Theft of, or non-accidental damage to, campus property, or property in the possession of, or owned by, a member of the campus community. so add to anaxisto amount as saviasments
- Unauthorized entry into, unauthorized use of, or misuse of campus property.

- On campus property, the sale or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics as those terms are used in California statutes, except when lawfully prescribed pursuant to medical or dental care, or when lawfully permitted for the purpose of research, instruction or analysis.
- Knowing possession or use of explosives, dangerous chemicals or deadly weapons on campus property or at a campus function without prior authorization of the campus president.
- Engaging in lewd, indecent, or obscene behavior on campus property or at a campus function.
- (k) Abusive behavior directed toward, or hazing of, a member of the campus community.
- Violation of any order of a campus president, notice of which had been given prior to such violation and during the academic term in which the violation occurs, either by publication in the campus newspaper, or by posting on an official bulletin board designated for this purpose, and which order is not inconsistent with any of the other provisions of this Section.
- (m) Soliciting or assisting another to do any act which would subject a student to expulsion, suspension or probation pursuant to this Section.
- For purposes of this Article, the following terms are de-
- (1) The term "member of the campus community" is defined as meaning California State University trustees. academic, non-academic and administrative personnel, students, and other persons while such other persons are on campus property or at a campus function.
  - (2) The term "campus property" includes:
  - (A) Real or personal property in the possession of, or under the control of, the Board of Trustees of The California State University, and
- (B) All campus feeding, retail, or residence facilities whether operated by a campus or by a campus auxiliary organization.
  - (3) The term "deadly weapons" includes any instrument or weapon of the kind commonly known as a blackjack, sling shot, billy, sandclub, sandbag, metal knuckles, any dirk, dagger, switchblade knife, pistol, revolver, or any other firearm, any knife having a blade longer than five inches, any razor with an unguarded blade, and any metal pipe or bar used or intended to be used as a club.
  - (4) The term "behavior" includes conduct and expression.

- (5) The term "hazing" means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization which causes, or is likely to cause, bodily danger, or physical or emotional harm, to any member of the campus community; but the term "hazing" does not include customary athletic events or other similar contests or competitions.
- This Section is not adopted pursuant to Education Code Section 89031.
- (p) Notwithstanding any amendment or repeal pursuant to the resolution by which any provision of this Article is amended, all acts and omissions occurring prior to that effective date shall be subject to the provisions of this Article as in effect immediately prior to such effective date.

41302. Disposition of Fees: Campus Emergency; Interim Suspension. The President of the campus may place on probation, suspend, or expel a student for one or more of the causes enumerated in Section 41301. No fees or tuition paid by or for such student for the semester, quarter, or summer session in which he or she is suspended or expelled shall be refunded. If the student is readmitted before the close of the semester, quarter, or summer session in which he or she is suspended, no additional tuition or fees shall be required of the student on account of the suspension.

During periods of campus emergency, as determined by the President of the individual campus, the President may, after consultation with the Chancellor, place into immediate effect any emergency regulations, procedures, and other measures deemed necessary or appropriate to meet the emergency, safeguard persons and property, and maintain educational activities.

The President may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim suspension shall be given prompt notice of charges and the opportunity for a hearing within 10 days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the President or designated representative, enter any campus of the California State University other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.

41303. Conduct by Applicants for Admission. Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified or denied to any person who, while not enrolled as a student, commits acts which, were he enrolled as a student, would be the basis for disciplinary proceedings pursuant to Sections 41301 or 41302. Admission or readmission may be qualified or denied to any person who, while a student, commits acts which are subject to disciplinary action pursuant to Section 41301 or Section 41302. Qualified admission or denial of admission in such cases shall be determined under procedures adopted pursuant to Section 41304.

41304. Student Disciplinary Procedures for The California State University. The Chancellor shall prescribe, and may from time to time revise, a code of student disciplinary procedures for The California State University. Subject to other applicable law, this code shall provide for determinations of fact and sanctions to be applied for conduct which is a ground of discipline under Sections 41301 or 41302, and for qualified admission or denial of admission under Section 41303; the authority of the campus president in such matters; conduct-related determinations on financial aid eligibility and termination; alternative kinds of proceedings, including proceedings conducted by a hearing officer; time limitations; notice; conduct of hearings, including provisions governing evidence, a record, and review; and such other related matters as may be appropriate. The chancellor shall report to the Board his actions taken under this section.

### Parking on Campus

Parking is enforced seven days a week, 24 hours a day. This includes weekends, holidays, Intersession, summer and spring break. This enforcement also applies to 15 and 30 minute zones (green curb), red curb, handicapped, state, maintenance/service vehicle and special permit designated areas. In addition, all provisions of the California Vehicle Code are enforced throughout the campus

Parking regulations are enforced during walk-through registration, change of program, and orientation. During this period of time immediately prior to classes, the summer and fall decals are valid in student decal lots. If you are not a continuing student but have received your notice of admission, and your student I.D. number is on file, you may purchase a student decal. If you do not plan to buy a decal, please purchase a daily permit and park in Lots A or G, or use the coin lot (six quarters to exit) located south of the campus and Nutwood Ave. just off Titan Drive.

Parking decals are required in order to park in all parking lots on campus other than daily permit lots. Student decals may be purchased by mail, at the Office of the University Cashier or at the registration fee payment station if purchased along with payment of the registration fees during walk-through registration. Only one decal will be issued to each student. Student parking decals are valid only when displayed on the rearview mirror while the vehicle is parked. By California law, if the decal interferes with driver vision it must be removed from the mirror when the vehicle is in motion. Ilada and mora and manos anothing ad T

Motorcycle decals are required for all motorcycles and mopeds and may be purchased only from the University Cashier. Motorcycles must park in designated areas of decal lots. Mopeds may be parked in designated motorcycle areas of decal lots or in bicycle

Parking decals for the handicapped are available for purchase only from the University Cashier. A signed authorization form must be obtained from Disabled Student Services (Library Room 113) and must accompany the decal application.

Daily permit parking is available in Lots A and G at the north end of campus (daily, year round) and Lots B, D E West/J and I after 4 p.m. (see map) Mondays through Fridays, and all day weekends and holidays. A permit may be purchased from any permit machine and is valid in any other available permit lot but only on the date of purchase.

Parking decals are not transferable. Decals are valid only when purchased from the University Cashier and officially recorded in that office. White make included most large well digits be becaused

## Debts Owed to the University

Should a student or former student fail to pay a debt owed to the university, the university may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt" until the debt is paid (see Title 5, California Code of Regulations, Sections 42380 and 42381). For example, the institution may withhold permission to receive official transcripts of grades for any person owing a debt. If a student believes that he or she does not owe all or part of an unpaid obligation, the student should consult the business office. The business office, or another office to which the student may be referred, will review the pertinent information, including information the student may wish to present, and will advise the student of its conclusions with respect to the debt.

## Student Rights Right of Petition

Students may petition for review of certain university academic regulations when unusual circumstances exist. It should be noted, however, that academic regulations when they are contained in Title 5, California Code of Regulations, are not subject to Farking decals are required in order to park in all park innoiting

Petition forms are available in the Office of Admissions and Records. The university petitions committee will take action on the petition based on recommendations provided by appropriate officers and the student will be notified of the decision. Results of the action will be placed in the student's folder in the Office of Admissions and Records.

The petitions committee members shall consist of the associate dean of each school, or designee, a professional staff member appointed by the director of admissions and records, the coordinator of undergraduate studies, one faculty member of the University General Education Committee, and the assistant registrar, who will serve as the secretary.

## Right of Noncompliance

Certain university activities either within or outside of the classroom may involve varying degrees of risk to the participants. It is university policy that the instructor directing such activities fully divulge to all potential participants the specific nature of such risks and obtain from them their expressed or implied consent prior to undertaking activities.

The student who at any time comes to believe that the risks, whether physical or psychological, are excessive has the responsibility to withdraw from participation at the time and to inquire of the instructor if there are alternative means of fulfilling the requirements without penalty. If there is none, the student may petition for withdrawal from the course without penalty or appeal for an appropriate modification of the activity. The appeal may be made either to the chair of the department concerned, or to the chair of the Committee on Activities Involving Human Subjects, or both, some same of an earth bas and line b

#### Right of Academic Appeal

The right of due process, appeal and peer judgment is established by the Student Bill of Rights and Responsibilities for students who feel they have been treated capriciously or with prejudice by faculty or administrators. Students should make every effort to resolve the issue informally by consulting the individual concerned, and if necessary the department chair and dean of the school.

Students who still believe the problem has not been resolved should consult with the coordinator of academic appeals. Upon the student's request, the coordinator will convene the Academic Appeals Board to hear the student's complaint. Students must initiate the appeals process by contacting the faculty member and/or the department chair within one academic month after they could reasonably be expected to be aware of the action in question.

Copies of the governing documents are available in the Academic Appeals Office.

### Privacy Rights of Students

The federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) and regulations adopted thereunder (34 C.F.R. 99) and California Education Code Section 67100 et seq., set out requirements designed to protect the privacy of students concerning their records maintained by the campus. Specifically, the statute and regulations govern access to student records maintained by the university, and the release of such records. In brief, the law provides that the university must provide students access to official records related to them and an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise inappropriate. The right to a hearing under the law does not include any right to challenge the appropriateness of a grade as determined by the instructor. The law generally requires that written consent of the student be received before releasing personally identifiable data about the student from records to other than a specified list of exceptions. The institution has adopted a set of policies and procedures concerning implementation of the statutes and the regulations

on the campus. Copies of these policies and procedures may be obtained from the vice president for student affairs. Among the types of information included in the campus statement of policies and procedures are: (1) the types of student records and the information contained therein; (2) the official responsible for the maintenance of each type of record; (3) the location of access lists which indicate persons requesting or receiving information from the record; (4) policies for reviewing and expunging records; (5) the access rights of students; (6) the procedures for challenging the content of student records; (7) the cost which will be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the Department of Education. An office and review board have been established by the Department to investigate and adjudicate violations and complaints. The office designated for this purpose is: The Family Educational Rights and Privacy Act Office (FERPA), U.S. Department of Health, Education and Welfare, 330 C Street, Room 4511, Washington, D.C. 20202.

The campus is authorized under the Act to release "directory information" concerning students. "Directory information" includes the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. The above designated information is subject to release by the university at any time unless it has received prior written objection from the student specifying information that the student requests not be released. Written objections should be sent to the vice president for student affairs.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons are those who have responsibilities in connection with the university's academic, administrative or service functions and who have reason for using student records connected with university or other related academic responsibilities. Disclosure may also be made to other persons or organizations under certain conditions (e.g. as part of accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; to other institutions to which the student is transferring).

#### Use of Social Security Number

While a social security account number is required from financial aid recipients and university employees, the use of the social security account number is optional for all other applicants and students. Applicants are requested to include their social security account number in designated places on applications for admission pursuant to the authority contained in Title 5, California Code of Regulations, Section 41201. The social security account number is used as a means of identifying records pertaining to the student as well as identifying the student for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other debts payable to the institution.

Students who are neither financial aid recipients nor university employees and who prefer to be identified by an alternate CSUF ID number may submit a written statement indicating this preference to the Admissions and Records counter in the lobby of Langsdorf Hall. Upon receipt of the request, an appropriate ID number will be assigned. The new number will be communicated to the student in writing.

Applicants for admission may request an alternate CSUF identification number by simply omitting their social security account number from their application for admission. An alternate ID number will be assigned and included in the application acknowledgement, which is mailed to the applicant.

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#### Use of Social Security Number

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Right of Petition

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#### Right of Noncompliance

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## Graduate Applications

All applicants for any type of postbaccalaureate or graduate standing (e.g., master's degree applicants, those seeking credentials, and those interested in taking courses for personal or professional growth) must file a complete application within the appropriate filing period. Second baccalaureate degree candidates should apply as postbaccalaureate students with an undergraduate degree objective. A complete application for postbaccalaureate or graduate standing includes all of the forms and fees described in the application booklet, including the supplementary graduate admissions application. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the nonrefundable application fee. In the event that an applicant wishes to be assured of initial consideration by more than one campus, it is necessary to submit a separate application (including fee) to

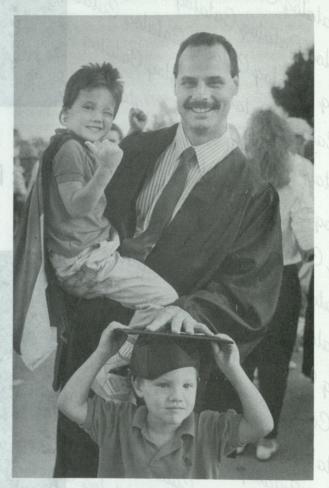
Applications may be obtained from the Office of Admissions and Records or the Graduate Studies Office of any California State University campus. Instructions for completing the application forms are included in the material supplied. Since some programs require the completion of an additional form as part of the application process, students should inquire concerning this possibility at the office of the academic unit offering the particular program.

## Transcripts

When an applicant for graduate standing, with a master's degree objective, a credential-only objective, or a master's degree and credential objective, receives the application acknowledgement, requests should be submitted to *all* of the institutions of higher learning in which previously registered, requesting that *two official* transcripts from each institution be sent to the university Admissions and Records office.

One copy of each transcript will be forwarded to the academic unit offering the degree or credential program specified by the student as the objective; and the other official transcript will be retained for use by both the Admissions and Records Office and the Graduate Studies Office.

Students who receive their baccalaureate degree at Cal State Fullerton and continuing graduate students who change their declared objective subsequent to admission must obtain whatever additional transcripts are needed to provide two complete sets of transcripts, but do not need to request Cal State Fullerton transcripts.



Postbaccalaureate applicants with no degree or credential objective must submit a transcript from the college or university where the baccalaureate was earned. Further, one transcript from other institutions attended is required as necessary so that Cal State Fullerton has a complete record of the last 60 semester units attempted prior to enrollment at Fullerton.

All transcripts must be received directly from the issuing institutions and become official records of the university; such transcripts therefore cannot be returned or reissued. Transcripts which include course work from other than the issuing institution are not sufficient evidence of course work taken elsewhere. Foreign language transcripts must be accompanied by certified English translations.

### Tests

The Graduate Record Examination (GRE), or another test, may be required for conditionally classified admission, or subsequently for the granting of classified standing. Test requirements vary from department to department. Students should refer to master's degree requirements outlined by each department in the "Curricula" section of this catalog. Applications and information on test dates for nationally administered tests (e.g. GRE, GMAT) are available in the Testing Center.

## **TOEFL** Requirement

All graduate and postbaccalaureate applicants, regardless of citizenship, whose preparatory education was principally in a language other than English, must demonstrate competence in English. Those who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must receive a minimum score of 550 on the Test of English as a Foreign Language (TOEFL). Students interested in the MBA program must present a minimum score of 570 on the TOEFL. Students interested in the M.M. and M.A. in Music must present a TOEFL of 560.

## International Students

See procedures outlined in the international student portion of the "Admissions Policies" section of this catalog.

## Second Master's Degree or Concentration

Students may wish to pursue a second master's degree or concentration. Approval for admission to graduate standing in the second degree program or concentration may be given only after the first degree has been awarded. Units used for the first degree or concentration may not be applied to the second. Students who have completed a master's degree at Cal State Fullerton in one concentration and wish to complete another will not be awarded a second degree.

#### Nonaccredited Schools

An applicant who is a graduate of a nonaccredited school must apply for admission as an undergraduate to complete requirements for a bachelor's degree from this institution. However, once admitted, a student in this category who gives evidence of unusual promise and superior background may petition for graduate standing as conditionally classified. If the petition is granted, the student may then proceed in the graduate program. If the petition is denied, the student may be requested to complete a specified number of undergraduate units in order to establish equivalency to the bachelor's degree or to complete requirements for a bachelor's degree at CSUF. For further information, contact the Graduate Studies Office.

## Graduate Admissions

Following completion of application procedures and subsequent review of the student's eligibility by the Admissions Office and appropriate academic unit, the student will be notified by the Admissions Office concerning admission. Only a written notice from the Admissions Office is valid proof of admission. Academic advisement prior to admission is tentative and cannot be construed as granting official admission to a program or establishing requirements for the degree.

Students may apply for a degree objective, a credential or certificate objective, or no program objective. Four admission categories are defined in terms of these academic objectives.

## Postbaccalaureate Standing: Unclassified

To qualify for admission with no degree objective, students must (1) hold an acceptable bachelor's degree from a regionally accredited four-year institution or have equivalent preparation as determined by the appropriate campus authority; (2) have a grade point average of at least 2.5 (A = 4.0) in the last 60 semester (90 quarter) units; and (3) have been in good standing at the last college attended. In unusual circumstances, exceptions may be made to these criteria.

Admission with postbaccalaureate-unclassified standing does not constitute admission to graduate degree or credential programs. If a student wishes to change academic objective after admission, an application for change of objective must be filed in the Admissions Office.

## Postbaccalaureate Standing: Classified

To qualify for admission with a credential or certificate objective, students must (1) meet the requirements for postbaccalaureateunclassified standing and (2) satisfy any additional professional, personal, scholastic, and other standards, including qualifying examinations. Refer to specific credential requirements under the departmental section of this catalog.

### Graduate Standing: Conditionally Classified

To qualify for admission with a graduate degree objective, students must (1) meet the admission requirements for postbaccalaureate-unclassified standing and (2) meet any additional requirements of the particular program including a favorable recommendation from the academic unit.

An applicant who has deficiencies in prerequisite preparation or in grade-point average may be considered for admission in conditionally classified standing with the approval and recommendation of the appropriate campus authority. A student admitted in conditionally classified standing may subsequently be granted classified standing in an authorized graduate degree curriculum if professional, personal, scholastic, or other standards including qualifying examinations are met.

## Graduate Standing: Classified

Determination of the student's prerequisites and assignment of courses, units, and grade points required to remove deficiencies is made by the academic unit. For specific information on prerequisites to classified standing, consult departmental program requirements.

Classified standing is normally granted when all prerequisites have been satisfactorily completed, the official study plan formulated, and the recommendation made by the appropriate graduate adviser and committee to the Dean of Graduate Studies who gives final approval. An eligible student may be granted classified standing prior to the first registration or during the first semester of registration.

No more than nine units of postgraduate work taken at this institution prior to classified standing will be applied to a master's degree study plan. Any acceptable transfer work is excluded from the nine units permitted.

It is the student's responsibility to initiate the request for classified standing in the appropriate academic unit by making an appointment with the departmental graduate adviser. The student will be sent a copy of the approved study plan by the Graduate Studies Office. Copies will be filed in the academic unit, university records, and the Graduate Studies Office. A student is not officially classified until an approved study plan is on file in the Graduate Studies Office.

# Requirements for the Master's Degree



To be granted the master's degree, a student must have been classified, advanced to candidacy, and completed a satisfactory pattern of study in an approved field. Requirements which apply to all programs follow. For specific requirements of particular programs, see the program descriptions in the departmental section of this catalog.

Each student's program for a master's degree (including eligibility, classified standing, candidacy, and award of the degree) must be approved by the graduate program adviser, the graduate committee, and the Dean of Graduate Studies.

## University Writing Requirement

Students working toward a master's degree are required to demonstrate writing ability commensurate with the baccalaureate degree. This requirement should be met within the first nine units of graduate work by successfully completing one of the following:

- 1. An upper-division writing requirement at any CSU campus.
- 2. An upper-division course at another university equivalent to a course which meets the Cal State Fullerton requirement. Such equivalence must be certified by the department or program responsible for the student's academic work.
- 3. Cal State Fullerton Examination in Writing Proficiency.
- 4. An upper-division or graduate-level course that is certified as meeting the writing requirement and is approved by the department or program responsible for the student's academic work. The grade received must be a C or better.

Any student who has not met the requirement within the first nine units of graduate work shall be required to enroll in a certified course at the earliest opportunity.

Departments and programs may, at their discretion and with approval of the Graduate Education Committee, establish additional writing requirements for their graduate students. For further information, students should consult their program adviser or the Graduate Studies Office.

## Study Plan

General requirements for the master's degree study plan include:

- A minimum of 30 approved semester units, or more, as determined by the particular program.
- 2. A minimum of 21 semester units in residence (transfer and Cal State Fullerton extension or intersession course work are not considered to be in residence).
- 3. A unit of course work taken at a college or university on the quarter system will be considered as equivalent to two-thirds of a unit when such course work is considered acceptable as transfer work. See additional requirements for transfer credit under "Graduate Enrollment Policies."
- 4. Upper-division and graduate-level courses only. The inclusion of 300-level course work is generally discouraged. The graduate program adviser must submit to the Dean of Graduate Studies a written justification for any 300-level course work proposed for inclusion on the study plan unless it is an existing program requirement.
- Not less than one-half of the total units in graduate (500-level) courses.
- Not more than six semester units for a thesis, if a thesis is required.
- 7. A maximum of six units of independent study.
- No courses taken to satisfy prerequisite requirements included in the minimum of 30 units.
- None of the following: correspondence courses, credit by examination, or similar.
- No courses with nontraditional grades (e.g., CR, S, P) and no grade on the study plan beow a C.
- A minimum grade-point average of 3.0 (B) in all courses attempted to satisfy requirements for the degree.
- Completion or satisfactory validation of all study plan courses within five years starting with the earliest course on the study plan.
- All courses taken after the baccalaureate (or postbaccalaureate credit granted) and not credited toward another degree.
- 14. A final evaluation, which may be a thesis, a project, a comprehensive examination, or any combination of these.

The approved study plan is valid as long as the student maintains continuous enrollment in regular semesters at the university; otherwise it is necessary to reapply and meet any changed or additional requirements approved in the interim.

#### Election of Curriculum

A student remaining in continuous attendance in regular semesters and continuing in the same curriculum may elect to meet the degree requirements in effect either at the time of entering the curriculum or at the time of completion of degree requirements, except that substitution for discontinued courses may be approved by the graduate program adviser.

#### Advisers and Committees

University policy provides that each student's program for the master's degree shall be under the guidance of an adviser and for some programs, a committee as well. A graduate program adviser is designated in each department or program to give overall supervision for the graduate program. In some departments, the graduate program adviser also serves as the individual student's adviser. Policies and procedures related to graduate committees are available in the Graduate Studies Office.

It is the responsibility of the student to arrange appointments for advisement and other information in the office of the academic unit offering the degree program. As a minimum, the student should obtain advisement (1) either prior to or during the first semester of attendance, (2) when requesting classified standing, and (3) when applying for a graduation check prior to the final semester.

It is advisable for the student to maintain a personal file of transcripts and other evidences of grades and achievements, and to carry these whenever seeking advisement.

## Advancement to Candidacy

A student who has been granted classified standing is normally advanced to candidacy after a request is filed for graduation by the student and an affirmative recommendation made by the graduate program adviser. A minimum grade-point average of 3.0 (B) for all study plan course work is required; other scholastic, professional and personal standards, the passing of examinations, and other qualifications, may be prescribed. Only those students who continue to demonstrate a satisfactory level of scholastic competence and fitness, as determined by the appropriate authorities, shall be eligible to continue in graduate programs.

## Completion of Requirements and Award of Degree

The degree is awarded upon the satisfactory completion of all state and university requirements, the specific requirements for the particular program, the recommendation of the appropriate graduate adviser and committee (advancement to candidacy), and the approval of the faculty and the Dean of Graduate Studies. It is highly recommended that all work for the degree, except final course examinations, be submitted by the last day of classes, in order to assure granting of the degree by the end of the semester or session.

If a thesis is required, it must be deposited in the Titan Bookstore in accordance with the instruction shown under "Theses and Projects," no later than the last day of final examinations for the semester or session in which the degree is to be awarded.

It is the student's responsibility to file an application for a graduation check and pay the graduation and diploma fee *prior* to the beginning of the final semester. Forms are available at the Admissions and Records information counter, the Graduate Studies Office, and the Registrar's Office graduation unit.

The application for graduation initiates review of degree requirements and formal approval by the faculty as well as serving as a diploma order. The last date to file the application is listed in the academic calendar of the class schedule for each regular semester. Candidates for August graduation must file their requests prior to registration for the spring semester.

Students who fail to complete requirements as planned must update the application for a graduation check and do so by the appropriate deadline. An additional fee may be required.

Since Cal State Fullerton is on the semester basis, master's degree programs are ordinarily completed in January and June. A student who wishes to complete requirements during the summer must obtain written approval prior to summer term on a form available in the Graduate Studies Office. The approved form must be returned to Graduate Studies during the spring semester.

The effective date of graduation will be the last day of the specific term in which requirements are completed.

Commencement ceremonies are held only at the end of the spring semester. Students completing requirements at the end of the fall and spring semesters and during the following summer may participate in those ceremonies. Information concerning commencement activities is sent to students by the Registrar during the final semester. Arrangements for cap, gown and hood rental are made in the Titan Bookstore.

## Time Limit for Completion

All requirements for the master's degree, including all course work on the student's study plan, normally should be completed within five years. This time limit commences with the semester of the earliest course used on the student's study plan and consists of a total of ten (10) consecutive semesters. When individual circumstances warrant, this time limit may be extended for up to two years (four additional consecutive semesters).

A student may request an extension of the five-year time limit by filing a petition with the Graduate Studies Office. The petition must contain a full explanation of the circumstances which prevented completion of the degree requirements within the normal five-year limit and must be approved (signed) by the graduate program adviser, the chair of the appropriate graduate committee and the Dean of Graduate Studies. Approvals for extension must be obtained prior to the expiration of the five-year limit.

Outdated course work (course work older than the student's approved time limit; i.e., normally five years but with approval may be a maximum of seven years) must be repeated. A maximum of nine (9) units of course work may be exempt from this policy if it can be validated. Copies of the "Petition for Validating Outdated Coursework" may be obtained from the Graduate Studies Office. Validation is allowed at the discretion of the graduate program adviser, the academic unit offering the subject course and the Dean of Graduate Studies. Validation must be accomplished by passing a written comprehensive test of the materials covered by the course being validated or by some equivalent method with prior approval of both the graduate program adviser and the Dean of Graduate Studies. Any outdated course work which cannot be validated either because of a denial of the petition or because it is in excess of the nine units allowed for validation, must be repeated or updated through the use of additional study plan course work. If course work is repeated or additional course work is required to update, the units and grades will be added to the study

NOTE: Outdated transfer course work cannot be validated.

## Changes in Study Plan

If a classified graduate student wishes to make a change in the approved study plan, a request should be made to the appropriate graduate program adviser. Requests must be made prior to registration for any course work to be substituted or added. No course may be removed from the study plan after a student has taken it. Forms which may be used to file a request are available in the Graduate Studies Office.

Changes in study plan may also be warranted by outdated coursework or grade-point average (see "Time Limit for Completion" and "Grade-point Average Standards").

## Graduate Enrollment Policies

Consult previous sections of this catalog and the class schedule for other information and regulations relating to registration and enrollment.

## Residence Requirement

A student is considered to be in residence when registered during regular semesters at this university. Of the minimum of 30 semester units of approved course work required for the master's degree, not less than 21 shall be completed in residence at this institution. Approved units earned in summer sessions may be substituted for regular semester unit requirements on a unit for unit basis. Extension or intersession course work may not be used to fulfill the minimum residence requirement.

#### Continuous Enrollment

A graduate student with a graduate degree objective should maintain continuous enrollment during regular semesters (summer sessions and extension excluded) until award of the degree. This policy is designed to eliminate the need for readmission to the university, provide opportunity for continuous use of facilities, including the Library, and assure the development of an integrated program, adequately supervised, and effectively terminated within the time limitations allowed by regulations.

Unless granted an approved leave of absence, a graduate student who fails to register each semester has discontinued enrollment in the graduate degree program. If the student wishes to resume studies, it will be necessary to reapply for admission to the university and to the degree program and meet any changed or additional requirements approved in the interim.

Students who may have completed all course work, but who may not have satisfactorily completed a comprehensive examination or other requirement, are expected to maintain continuous enrollment until award of the degree.

A graduate student who finds it impossible to attend during a certain semester and is not eligible for a leave of absence, must register in Graduate Studies 700. Registration in this course is restricted to conditionally classified or classified graduate students. It carries no unit credit and does not require class attendance. Registration in this course in each semester when no other course work is taken will be necessary until award of the degree.

Similarly, Credential Studies 701 is available for students with a credential-only objective who find it impossible to enroll in course work and are not eligible for a leave of absence.



## Leave of Absence

Graduate degree or credential students may request a leave of absence for up to one year. Conditionally classified or classified graduate students qualify for a leave if they are in good academic standing and have completed at least six credit hours' work toward the degree in residence at Cal State Fullerton. Students with a credential-only objective qualify if they have completed at least one semester of course work in good academic standing. Forms to request a leave of absence are available at the Admissions and Records information counter or in the Graduate Studies Office.

Any one of the following circumstances may be grounds for requesting a leave of absence:

- 1. Illness or disability (permanent or temporary) or similar personal exigencies including pregnancy which make it impossible or inadvisable for a student to register for classes.
- 2. Activities which enhance a student's professional career objectives.
- 3. Active duty in the armed forces of the United States.
- 4. Other reasons at the discretion of the Dean of Graduate Studresies. The best sone and the rest but so yet a season when

After review by the Graduate Studies Office, the academic unit (where applicable), and the Registrar's Office, a response is mailed to the student.

A first-time leave of absence of one semester only will normally be granted upon request for students who qualify and will not require an application for readmission to the university. Registration materials for the semester following the leave will be sent to the student.

Students requesting a subsequent leave or a leave longer than one semester are required to provide appropriate documentation (e.g., doctor's recommendation, verification of employment). Such requests must also be endorsed by the program adviser.

A leave granted to a degree objective student preserves the election of curriculum rights regarding catalog requirements. However, leaves of absence do not change the time limit for completion of the degree. For credential students, a leave granted by the University does not exempt them from new requirements imposed by the State regardless of the catalog year and also does not extend time limitations imposed by the State for completing specific teaching credential requirements.

### Study Load

Graduate students must carry a study load of 12 units of course work a semester or nine units of which six are in 500-level courses for full-time enrollment certification by the university. A normal full-time load in summer session is one and one-third units per week of instruction. The maximum study load for students working toward a master's degree is 12 units per semester; in exceptional cases, however, a student may take more with the approval of the graduate program adviser.

## **Enrollment in Extended Education** Programs

In addition to its regular academic programs, the university offers a number of courses through its extended education program. These include the summer session, the extension program and adjunct enrollment (a program permitting those who are not formally enrolled to take regular university courses).

The applicability of credit earned through courses taken in any of the programs sponsored by the Office of Extended Education is subject to approval by the graduate program adviser and Dean of Graduate Studies, Share to those persons the document of the studies of the studi

### Summer Sessions and and ad beyongs and reum box sample

Appropriate courses taken during the summer session may be applied to a graduate degree program, providing the courses are approved in advance. YOMOT TADOTO TOTALISTI

#### Extension and and amendment of the parties of the latest o

No more than nine units of credit earned in the university extension program (including intersession course work) may be applied to a graduate degree. Consultation with a graduate adviser before taking an extension course is strongly recommended.

It should be noted that enrollment in summer session or extension courses does not constitute admission to the university or enrollment as a continuing student in the university. Any student desiring a master's degree must be admitted to a regular semester (fall or spring).

## Enrollment in 500-Level Courses by Seniors

Undergraduate students may enroll in graduate level courses (500-level) if they:

- a. have reached senior status (i.e., completed a minimum of 90 semester units)
- b. have the academic preparation and prerequisites required for entry into the course
- gain the consent of the instructor.

Students wishing to use 500-level course work taken during their undergraduate degree toward a master's degree should read the following section on Postgraduate Credit.

## Postgraduate Credit

A graduate student may petition for a maximum of nine units of postgraduate credit for course work (either 400- or 500-level) taken during the undergraduate degree at California State University, Fullerton, if:

- a. the course work was not used to meet any of the university's requirements for the baccalaureate degree (including major, minor or concentration)
- the course work was taken during the twelve months immediately prior to the student's graduation
- c. the coursework was completed with a grade of B or better.

Petition forms are available at the Admissions and Records information counter. If approved, appropriate notations will be entered on the student's permanent record.

The use of postgraduate course work on a student's graduate study plan is governed by the general regulations for all graduate degrees and must be approved by the program adviser, the appropriate graduate committee and the Dean of Graduate Studies.

### Transfer Credit Policy

Graduate students may be able to use a limited amount of transfer course work in meeting the requirements for a master's degree. The use of transfer course work on a student's study plan is subject to the following provisions:

- 1. The course work being transferred must:
  - a. have been taken at an accredited college or university.
- b. be acceptable for credit toward a graduate degree at the institution where the course work was taken.

- c. have been completed with a grade of B or better.
- d. not have been used in meeting the requirements for another earned degree (either graduate or undergraduate).
- e. have been completed within the student's five-year time period which is required for completion of the requirements for the master's degree at CSUF.
- 2. An absolute minimum of 21 semester units toward any master's degree at CSUF must be in residence units. For master's degrees requiring more than 42 semester units, a minimum of half of the units used on the student's study plan must be in residence units. Residence units include regular courses and extension courses offered as special sessions.
- 3. Use of transfer work on a student's study plan is subject to all other policies concerning study plan course work; e.g., fifty percent must be graduate level work, no correspondence course work, no credit by examination, no courses with nontraditional grades, no grade below a C.
- 4. In all cases, the use of transfer course work on a student's study plan is subject to the acceptance and approval of the academic unit's graduate adviser and the Dean of Graduate Studies. Course work taken at another institution after admission to CSUF as a graduate student is rarely accepted for credit toward a master's degree and can only be accepted if the student has received prior approval of both the graduate adviser and the Dean of Graduate Studies.
- 5. All approved transfer units and grade points will be entered on the CSUF transcript at graduation.

Study Load

## Graduate Academic Standards

## Grade-Point Average Standards

#### University

A graduate degree student is expected to earn a 3.0 average in all units subsequent to admission to the program. In adddition, a graduate degree student must earn a 3.0 average in all 400- and 500-level courses taken in the student's department or program (including 400- and 500-level program prerequisites). Any 400and 500-level course taken only to satisfy credential or certificate program requirements shall not be considered applicable.

#### Study Plan

The 30 or more semester units of approved study plan course work, including transfer work, required for the degree must be completed with a 3.0 (B) minimum grade-point average. Only grades of A, B, or C are considered satisfactory for study plan courses. If a student receives a grade less than a C on a study plan course, the course must be repeated and passed with a grade of C or better. A course may be repeated ony once.

In extenuating circumstances, the student can petition the Office of Graduate Studies to add another course to the approved program with unit value equivalent to that of the course in which the unsatisfactory grade was received.

If a student approaches the completion of the degree requirements with less than a 3.0 average, a request may be made for a change in the study plan to

- a. add no more than six units of course work in order to achieve at least a 3.0 grade point average, or
- b. repeat no more than six units of course work in which a C or lower was earned in order to achieve at least a 3.0 grade point
- c. A combination of a. and b. equal to six units.

Requests for course work to be added to the study plan or repeated must be approved by the graduate program adviser and Dean of Graduate Studies prior to registration (see "Changes in Study Plan"). If the grade-point average at any time falls below such a level that it cannot be raised to a 3.0 within the prescribed limits of course work, this has the effect of disqualifying the student from the master's degree program.

If permission is given to repeat a course, both grades are considered in computing grade-point averages. However, successful repetition of a course originally passed carries no additional unit credit toward a degree.

When a course is added, the original course stays on the study plan and both grades received shall be used in the calculation of the student's GPA.

## Academic Probation and Disqualification

A graduate student enrolled in a graduate degree program in either conditionally classified or classified graduate standing is subject to academic probation if a cumulative grade-point of at least 3.0 (grade of B on a four-point scale) is not maintained. A listing of students subject to probation is reviewed each semester by the Office of Graduate Studies with the advice of the student's graduate program adviser.

The Office of Graduate Studies, with the advice of the student's graduate program adviser, will disqualify a graduate student who is on academic probation if the student does not, or cannot, raise the study plan and applicable course work cumulative gradepoint average to 3.0 by the completion of the second regular semester (exclusive of interim and summer sessions) following the session in which the cumulative grade-point average failed to meet the minimum 3.0 standard.

A student who has been disqualified from a master's degree program or from a postbaccalaureate credential or certificate program may apply for readmission to that program or to another program after one calendar year following disqualification. A readmitted student must file a new study plan which meets current requirements and policies. Any disqualified student who wishes to use previous course work must have it approved by the Office of Graduate Studies.

Disqualification will prevent further registration in a particular program or further enrollment in the university, as determined by appropriate campus authority.

A graduate student may also be placed on probation or may be disqualified for reasons other than cumulative grade-point average. These reasons include repeated withdrawal, failure to progress toward an educational objective, non-compliance with an academic requirement, and inappropriate behavior as defined in the Student Bill of Rights and Responsibilities, and in the Academic Dishonesty sections of this catalog (see "University Regulations").

A postbaccalaureate student (credential, unclassified, or undeclared status) shall be subject to academic probation if after completing 12 or more units, the cumulative grade-point average falls below a 2.5 average. A postbaccalaureate student on probation shall be subject to disqualification if at least a 2.50 gradepoint average is not earned each term after the completion of 12 units in postbaccalaureate status. Disqualification may be either from further registration toward a postbaccalaureate credential or certificate program, or from further enrollment in the university as determined by the Dean of Graduate Studies.

## Declassification

Graduate students in classified graduate standing shall be declassified upon the recommendation of the appropriate academic unit, with a change to postbaccalaureate standing, unclassified, when one or more of the following conditions exist:

- 1. The student's request for declassification has been recommended for approval by the graduate committee.
- 2. The student fails to maintain the grade-point average required in the master's degree program.
- 3. The student has failed to demonstrate a satisfactory level of scholastic competence and fitness.
- 4. The student fails to complete the degree within the prescribed time limit. Tol superioruper adr. lo susa se papartragel

A recommendation for declassification is sent to the Graduate Studies Office by the graduate program adviser for the particular degree.

## Theses and Projects

#### Definition

A thesis is defined as the written product of a systematic study of a significant problem. It identifies the problem, states the major assumptions, explains the significance of the undertaking, sets forth the sources for and methods of gathering information, analyzes the data, and offers a conclusion or recommendation. The finished product evidences originality, critical and independent thinking, appropriate organization and format, and thorough documentation. Normally, an oral defense of the thesis is required.

A project is a significant undertaking appropriate to the fine and applied arts or to professional fields. It also evidences originality and independent thinking, appropriate form and organization, and a rationale. It is described and summarized in a written abstract that includes the project's significance, objectives, methodology and a conclusion or recommendation. An oral defense of the project may be required.

#### Annual Thesis Award

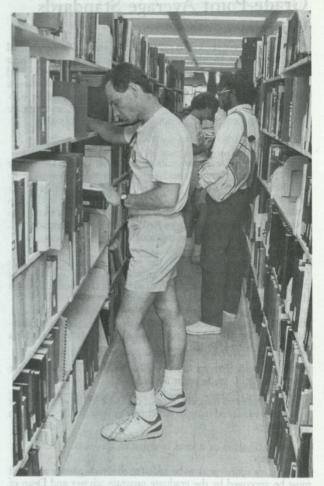
An award of \$500 along with an engraved plaque will be given each year to the student whose thesis represents the highest standard of scholarly accomplishment as determined by a panel of judges chosen from emeriti professors. Interested students should contact the Graduate Studies Office or their program adviser for further information on eligibility and deadlines. Finalists from each school may also be recommended for Honorable Mention by the judges; these will receive a certificate of Honorable Mention and a cash award.

## General Regulations

Of the minimum of 30 semester units of approved course work required for the master's degree, no more than six are allowed for a thesis.

When a thesis is required, the Library is to be provided with the approved original copy, or a fully acceptable duplicated copy, in the approved binding, and an acceptable microfilm of it. An abstract accompanies the thesis and will normally be published in the University Microfilms International journal, Masters Abstracts. Copies are thereby made available for order by interested scholars.

An approved copy of the thesis or project may also be required by the student's academic department. Students should check with their graduate program adviser as to whether a copy is needed by the department as part of the requirements for graduation.



When a project is required, it will be filed with the academic unit offering the degree program. Some record of the project, or the project itself, is preserved in the academic unit and, when appropriate, in the Library. When the appropriate authority recommends, a project or its written record may be treated as a thesis.

Although a minimum of three faculty members supervise and approve the thesis, it is possible for a qualified person who is not a regular university faculty member to serve as a visiting examiner and join in the approval of the written record. This person serves as the fourth member of the committee.

Title to theses (and projects when treated as theses, as above) passes to the university upon their acceptance by the evaluating

Variations from procedures and regulations should be referred to the Office of Graduate Studies for approval.

### Format Guidelines and Style Manuals

All-university format guidelines are included in a thesis manual which has been developed to assist the student in preparation of a thesis or a project which is to be treated as a thesis. Copies are available in the Office of Graduate Studies. It is the student's responsibility to make certain that the requirements are met. The student is strongly advised to become familiar with the instructions in the manual. Theses from the library or departmental offices should not be used as examples of correct format.

The academic unit, through the student's adviser and/or committee, is responsible for the academic content and English usage in the thesis and for the student's correct use of forms of documentation and bibliography. In addition to the university format guidelines, each academic unit may select a supplementary style manual to be followed in matters of documentation and bibliography. Students should consult their academic program adviser or thesis committee chair concerning the style manual used.

If the supplementary style manual presents regulations which conflict with the all-university format guidelines published in the thesis manual, the university regulations take precedence.

Some graduate programs require style manuals or guides designed for journal articles. Although these are helpful for abbreviations, tables, figures and footnoting, as well as other purposes, students should be aware of the difference between a thesis and an article and make appropriate adaptations, approved by the graduate program adviser.

If the academic unit does not recommend a specific style manual, the student should refer to A Manual for Writers of Term Papers, Theses, and Dissertations (Fifth Edition) by Kate L. Turabian.

## Thesis Typists

The student makes all necessary arrangements for the typing of the thesis. A list of thesis typists is available in the Office of Graduate Studies. The university Career Development Center also maintains a listing of students and others who have indicated their availability for typing assignments. An experienced typist is strongly advised, although the university does not endorse or recommend individual typists. It because own sized and lo

## Deadlines appropriate fees. The bookstore arran appropriate

Adequate time should be allowed for typing, reading and approval by the adviser, the committee members, and the university thesis reader.

It is recommended that the academic area sponsoring the degree program require that the final version of the thesis be submitted for approval at least six weeks prior to the last day of classes of the appropriate semester. The deadline for submission to the university thesis reader is two weeks prior to the last day of classes. For summer completion, the student should check with the academic unit and the Office of Graduate Studies for appropriate deadlines. The Office of Graduate Studies must receive notification from the Titan Bookstore by the last day of final examinations for the appropriate semester or session that the thesis has been deposited there and the fees paid. Ample time should be allowed for any special arrangements, such as duplication of the thesis by the Titan Bookstore or elsewhere, prior to the deadline.

#### Final Procedures

- 1. Approval Signatures: When the final draft is completed, the student obtains signatures on the approval page of all of the members of the committee. The title/approval page may be photocopied onto the correct paper stock; however, the signatures must be original. Photocopied signatures are not acceptable for binding or microfilming. The signatures must be in black ink. If there is a disagreement within the committee concerning the acceptability of the thesis, the approving signatures of a majority of the committee will be sufficient. Nonavailability of one member of the committee is not an adequate reason for acceptance of signatures by less than the full committee. No changes or additions will be allowed after the final signatures have been obtained. The student should arrange for at least three original title pages to be signed by the committee members. (Two originals are submitted to the bookstore with the thesis or project; one may be the student's personal copy or be used for the departmental copy.)
- 2. University Thesis Reader: The thesis is ready for review by the university thesis reader after the faculty have signed off and the thesis has been typed in its final form. One unbound copy of the thesis including the original approval page is taken to the Office of Graduate Studies for review by the thesis reader for conformity to all-university format guidelines. The copy

submitted to the Graduate Studies Office may be a photocopy provided it is copied on the correct paper stock. The student, graduate program adviser, and thesis committee chair will be notified of any revisions or corrections which need to be made. Final approval on format is given by the Office of Graduate Studies on the "Thesis Approval Form."

3. Binding and Microfilming: The student takes the approved copy of the thesis, two signed title and approval pages, and the signed Thesis Approval Form to the Titan Bookstore and pays the appropriate fees. The bookstore arranges for the binding of the thesis by a local bindery and other services by University Microfilms International (UMI). Once submitted and receipted, the thesis may not be withdrawn by the student from the Titan Bookstore. The Titan Bookstore sends the approved original or duplicated copy (including the original signed approval page) to University Microfilms International for filming and publication of the abstract, and upon its return sends it to the bindery.

An agreement is normally completed for UMI to publish the

abstract in Masters Abstracts, prepare a negative microfilm, and sell microfilm or xerographic copies to interested scholars. The university will accept alternative methods of microfilming, duplication of printed copies and binding, subject to the specifications on file in the Graduate Studies Office. Arrangements for copyrighting are also possible, if desired, through UMI.

- 4. Notification for Award of the Degree: The grade for the thesis is reported in the usual manner to the Office of the Registrar by the appropriate faculty. The Titan Bookstore notifies the Office of Graduate Studies that the approved thesis has been deposited, the fees paid, and the agreement for microfilming and publication of the abstract completed by the student.
- 5. Depositing of Thesis in Library: When the thesis is returned by the bindery, the bound copy is deposited for circulation in the library. One set of the slides or separately mounted illustrative material is housed with the bound copy. The second set is placed in the university archives with the microfilm copy.

## Steps in the Master's Degree

There may be additional steps for individual students in particular programs; for these, consult the program description and the academic unit (school, department or program) offering the degree program.

- · Action initiated by student (as indicated below)
- 1. Admission to Graduate Standing: Conditionally Classified
  - · Apply for admission
  - Declare objective(s), using precise codes on the application form
  - Receive application acknowledgement from the Admissions Office
  - Request two sets of official transcripts of all previous college-level course work attempted to be sent to Admissions
    Office
  - Take tests, if required by program, and order test scores sent to Cal State Fullerton, designating appropriate academic unit on the test registration form
  - · Consult appropriate academic unit for advisement
  - Provide appropriate academic unit with any other supporting statements or materials, as required

Recommendation for admission made by academic unit to Admissions Office

Receive notification of admission from Admissions Office

#### 2. Graduate Standing: Classified

- Complete any course prerequisites and/or remove deficiencies
- Apply for classified standing in the academic area offering the particular program prior to completion of nine units of study plan course work
- Consult appropriate academic unit for advisement, including development of official study plan
- Provide appropriate academic unit with any other supporting statements or materials, as shown in program descriptions in this catalog
- Take tests if required by program, and order test scores sent to Cal State Fullerton, designating appropriate academic unit on the test registration form

Recommendation made by academic unit to the Dean of Graduate Studies

Receive notification of classified standing being granted from Graduate Studies when the study plan is sent, showing approval by the Dean of Graduate Studies.

 If not received within a reasonable length of time, call the academic unit sponsoring the degree or Graduate Studies.

#### 3. Completion of Requirements

- Apply for a graduation check and advancement to candidacy prior to the beginning of the final semester and no later than the deadline initiating university review and formal approval by faculty. The form is available at the Admissions and Records information desk, the Graduation Unit and the Graduate Studies Office. A graduation and diploma fee must be paid when filing the request with the university cashier.
- · Consult appropriate academic unit for advisement
- · Complete written and/or oral examination, if required
- · Complete thesis or project, if applicable
  - · Obtain approval of committee
  - Obtain approval of university thesis reader (thesis only)
- Deposit approved copy of thesis and make arrangements for binding, microfilming and publication of the abstract in the Titan Bookstore by the applicable deadline

Final, approved study plan, with recommendation, sent by appropriate academic unit to Dean of Graduate Studies

Preliminary approval, pending adequate grades, and completion of any other requirements, granted by Dean of Graduate Studies.

- Deposit approved copy of thesis or project in academic department (if required)
- Complete all general and specific requirements, other than final course examinations, by the last day of classes, in order to assure granting of the degree by the end of the semester.

Final verification of completion of requirements sent by the Graduate Studies Office to the registrar

Receive notification of award of degree from registrar approximately eight weeks after the end of the semester

#### 4. Commencement

 Make appropriate arrangements for cap, gown and hood rental in Titan Bookstore

Commencement information sent by the Registrar's Office

## and salada barrers over Steps in the Master's Degree

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  Office
- Take tens, if required by program, and order test scares sent to Cal State Fullerron, designating appropriate wademic unit on the test regulation form
  - · Consult appropriate academic unit for advisement
- Provide appropriate academic unit with any other supporting afavenents or materials, as required

Recommendation for admission made by academic truit to Admissions Office

Receive notification of admission from Admission Office

- 2. Graduate Standing. Classifical
- Complete any course presequisites and/or remove deficient
- Apply for classified standing in the academic area offering the particular program prior to completion of nine units of study plan course work.
- Consult appropriate academic unit for advisement, including development of official study plan
- Provide appropriate academic unit with any other supporting statements or materials, as shown in program descriptions in this caralog.
- Take rests if required by program, and order rest scores sunt
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  unit on the test registration form

Recommendation made by academic unit to the Depti of Oradiane Studies

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  - · Complete written and/or oral exaumation, if required
    - · Complete thesis or project, if applicable
      - Obesin agential of committee
- Obtain approval of university thesis reader (thesis only)
- Deposit approved copy of thesis and make immements for binding, micrefilming and publication of the abstract in the Train Bookstore by the applicable deadline

Final, approved study plan, with recommendation, sent by approved academic unit to Dean of Graduate Studies

Preliminary approval, pending adequate grades, and completion of inty other requirements, granted by Dean of Graduate Studies.

- Deposit approved copy of thesis or project in academic department (if required)
- Complete all general and specific requirements, other than final course examinations, by the last day of classes, in order to assure granting of the degree by the end of the semester

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Receive notification of award of degree from registrar approximately eight weeks after the end of the semester

- Commencent
- Make appropriate arrangements for cap, gown and hood rental in Titan Bookstone

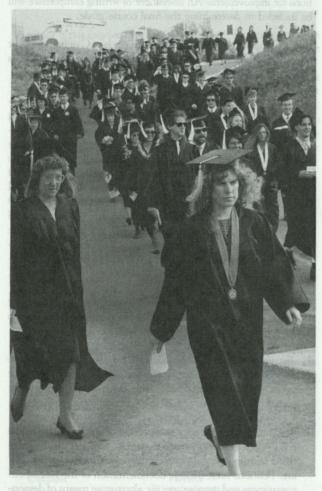
Commencement information sent by the Registrar's Office

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## Degree Programs

California State University, Fullerton offers the following bacca- laureate degree programs which are described on the pages listed:	The following master's degree programs are offered:
addicate degree programs which are described on the pages investigation	M.S. Accountancy 225
B.A. American Studies	M.A. American Studies 398
B.A. Anthropology	M.A. Anthropology 404
B.A. Art	M.A. Art
B.F.A. Art	M.F.A. Art
B.S. Biochemistry	M.A. Biology 529
B.A. Biological Science	M.B.A. Business Administration
	M.S. Chemistry
B.A. Business Administration	M.S. Civil Engineering
B.A. Chemistry	M.A. Communications
B.S. Chemistry	M.A. Communicative Disorders
D.S. Child Development	M.A. Comparative Literature
B.S. Civil Engineering	M.S. Computer Science
B.A. Communications	M.S. Computer Science 339
B.A. Communicative Disorders	M.A. Economics
B.A. Comparative Literature	
B.S. Computer Science	M.S. Education (with concentrations in bilingual/bi-
B.A. Criminal Justice	cultural education [Spanish-English], elementary curricu-
B.A. Dance 209	lum and instruction, reading, educational administration,
B.A. Economics	special education and teaching English to speakers of other
B.S. Electrical Engineering	languages)
B.S. Engineering (Engineering Science) 307	M.S. Electrical Engineering
B.A. English 418	M.S. Engineering (Engineering Science) 307
B.A. Ethnic Studies (option in Afro-Ethnic studies) 393	M. A. English
B.A. Ethnic Studies (option in Chicano studies) 410	M.S. Environmental Studies
B.A. French	M.A. French 434
B.A. Geography 450	M.A. Geography
B.S. Geology 545	M.A. German
B.A. German 431	M.A. History 458
B.A. History 458	M.A. Interdisciplinary Studies 168
B.S. Human Services	M.A. Linguistics 473
B.A. International Business with a concentration in	M.S. Management Science 260
French, German, Japanese, Portuguese or Spanish 251	M.A. Mathematics 551
B.A. Japanese	M.S. Mechanical Engineering
B.A. Latin American Studies	M.A. Music
B.A. Liberal Studies	M.M. Music
B.A. Linguistics 473	M.S. Physical Education
B.A. Mathematics 550	M.A. Political Science
B.S. Mechanical Engineering 323	M.A. Psychology
B.A. Music	M.S. Psychology (Clinical)
B.M. Music	M.P.A. Public Administration
B.S. Nursing	M.A.T. Science
B.A. Philosophy	M.A. Social Sciences
B.S. Physical Education	M.A. Sociology
B.S. Physics	M.A. Spanish (including emphasis in bilingual
B.A. Political Science (including concentration in public	
administration)	
B.A. Psychology	M.A. Speech Communication
	M.S. Taxation
B.A. Religious Studies	M.A. Theatre Arts
B.A. Russian & East European Area Studies 510	M.F.A. Theatre Arts (with concentrations in Acting,
B.A. Sociology	Directing, and Technical Theatre and Design) 210
B.A. Spanish	
B.A. Special Major	
B.A. Speech Communication	
d I booteo O etc	

## Graduation Requirements for the Bachelor's Degree



### Unit Requirements

#### A. Total Unit Requirements

The minimum number of semester units necessary for a bachelor's degree, exclusive of remedial courses (i.e. course numbered 0-99) is as follows:

1. For the Bachelor of Arts degree	124
2. For the Bachelor of Fine Arts degree	132
3. For the Bachelor of Science degree 124-	132
4. For the Bachelor of Nursing degree	128
5. For the Bachelor of Science in Engineering degree	135
6. For the Bachelor of Music degree	132

#### B. Upper-Division Requirement

A minimum of 40 semester units of upper division coursework is required for any CSUF bachelor's degree. Courses offering upper division credit are those numbered at the 300- and 400-levels.

All units from upper division courses are applicable to the upper division units requirement, including units from courses in the major, the minor, and general education.

### C. Special Unit Totals

The maximum number of special semester units accepted for a

bacticion's degree is as follows.	
Transferable units from community or junior colleges	
2. Transferable units from a four-year university or college or from a combination of two and four-year institutions	
3. From credit by examination	30
4. From extension & correspondence courses	
5. From credit/no credit courses	36
6. From Reading Skills courses numbered at the 100- and 200-levels	4
7. From Internship courses	6
8. From Independent Study courses	9

## Residence Requirement

A minimum of thirty (30) semester units must be earned in courses taken at California State University, Fullerton. Twenty-four (24) of these units must be earned in upper division courses. At least twelve (12) upper division semester units in the major must be taken at this institution. Courses taken in extension (except for summer session and intersession courses offered as part of the special sessions program) and units earned through credit by examination may not be used to fulfill these requirements.

## Grade Point Average Requirements

Three grade point averages, each 2.0 or higher, are required for graduation:

- A. An average based on all units attempted, including those attempted at other institutions.
- B. An average based on all units attempted at CSUF.
- C. An average based on all units attempted in the major.

## Distribution of Requirements

#### A. General Education

A minimum of 51 semester units are needed to complete CSUF's general education requirements. See the "General Education" section of this catalog.

#### B. Major

The unit requirements in a major varies substantially from major to major. Some majors require as little as 33 semester units while others require as much as 105 units. Refer to the Department listings for the specific requirements of any particular major.

#### C. Upper-Division Baccalaureate Writing Requirement

The university requires that every person completing bachelor's degrees under 1980-81 and later catalog requirements, demonstrate writing ability acceptable for graduation. The upper-division writing requirement has two parts; students must satisfy each:

Upper-division course requirement: Each major requires that students pass a specially designated upper-division course or courses of at least three semester units. Examination requirement: The university faculty requires that each student pass the University Examination in Writing Proficiency (EWP), which has been designed to measure writing ability.

Courses. The University Board on Writing Proficiency must certify the course or courses that each major department designates to fulfill the requirement. Departments and programs may specify ei-

ther a single course of at least three units which involves intensive instruction in writing, or two or more courses (a total of at least six units) in which students are required to write one or more lengthy papers, or several shorter ones, which involve the organization and expression of complex ideas. In these courses students will be given careful and timely evaluations of their writing and suggestions for improvement. An assessment of writing competence will be included in determining the final course grade.

Students must pass these courses with a grade of C or better. A list of courses designated for each major will appear in the class schedule each semester.

Examination. After completing 60 units toward the baccalaureate, students must take the University Examination in Writing Proficiency (EWP). The EWP consists of two parts, a machinescored test of Standard Written English, and a 90-minute essay which is evaluated by faculty readers. Students who fail the examination may retake it until they pass it. A limited number of students who have failed the EWP two or more times may enroll in English 199, Intensive Writing Review. Credit in English 199 will be equivalent to passing the examination. This course will not count toward graduation requirements, nor will it satisfy the upper division writing course requirement described above. Information about registration for the EWP and testing dates is published in the class schedule each semester.

Petitions. In certain cases, students may petition the University Board on Writing Proficiency for exemption from or modification of the requirement.

- 1. Transfer students and candidates for a second baccalaureate may be certified as meeting the requirement after they have submitted to the Board acceptable evidence of having completed the equivalent to CSUF's upper division requirement.
- 2. Students may petition for substitution of an alternative to the EWP when exceptional circumstances, e.g. a clinically identified learning disability, make the examination inappropriate. Petitions must include documentation of the special circumstances and propose specific alternative means of demonstrating writing proficiency.

#### D. Minors

A minor is a means by which students can enrich their academic preparation through concentrated study of a discipline related to, or different from, their declared major. Although students can pursue multiple majors, many decide that declaring a major and a minor is a more desirable choice. A minor provides a structured selection of courses to augment or complement the student's major by broadening a student's academic experience or serving as preparation for a specific career. A minor can extend the student's knowledge in two related areas (e.g., English and Speech Communication, Anthropology and Foreign Languages, Sociology and Women's Studies) or in two disparate ones (e.g.,

Business Administration and Computer Science, Economics and Foreign Languages, Mathematics and Psychology). A minor can also enable students to systematically explore fields of knowledge about which they are curious or enthusiastic. Students may wish to consult with an adviser in their major department for recommendations of suitable minor fields of study.

A minor is not required for the baccalaureate; however, students may elect to complete one or more minors from those available and have that noted on their records. In completing the requirements for a minor, a minimum of twelve (12) units, of which at least six (6) must be upper division, must be distinct and different from the units used to complete the requirements of the major. Any units above this minimum requirement which can be used to satisfy both the requirements for the minor and for the major may be double counted. General education courses, however, may be used to meet minor requirements.

Below is a list of currently approved minors:

Afro-Ethnic Studies American Studies Anthropology Art Biotechnology

Business Administration

Chemistry Chicano Studies Child Development Christian Studies Computer Science Conservation Criminal Justice Economics

English Foreign Language French

German Portuguese Spanish Geography

Geology Gerontology Health Promotion

History

Human Services International Politics lapanese

**lewish Studies** Latin American Studies

Linguistics

Management Information

Systems Mathematics

Mathematics for Teacher

Education Military Science

Music

Pacific Rim Studies Peace Studies Philosophy Physical Education

Physics

Political Science

Psychology

Public Administration Religious Studies

Sociology

Speech Communication

Women's Studies

#### E. Electives

After fulfilling the requirements in general education, and a specific major (and possibly a minor), each student is free to choose the rest of the courses needed to complete the semester units required for graduation. Different majors vary considerably in both the number of units they require in their own and related fields. They also vary considerably in the amount of latitude or choice they permit in

selecting courses to satisfy the major requirement. The general education requirement encourages freedom of choice within the natural sciences, social sciences, arts and humanities, and basic subjects. Students at the university use their electives to broaden their general education, deepen some aspect of their specialties, pursue work in related fields, and satisfy curiosities and enthusiasms for particular subjects or areas of interest.

Advisement on general education and electives is provided by the Academic Advisement Center.

#### F. Multiple Majors and Second Baccalaureate Degrees

Within the units required for the baccalaureate it is possible for a student to complete the requirements for more than one major within a degree program when the additional major is within the degree of the first major. At least 24 units, including 12 at the upperdivision level, in each bachelor of arts major, or 36 units, including 18 at the upper-division level, in each bachelor of science major, must be applied exclusively to the respective major and may not be used to meet requirements in other majors or in general education. The student shall declare the additional major with the appropriate department not later than the beginning of the student's final year of study. The completion of additional majors will be noted at the time of graduation by appropriate entries on the academic record and in the commencement program.

It is also possible for a student to complete a major in one degree program and an additional major from a different program, provided the minimum units described in the preceding paragraph are applied exclusively to the respective major and are not used in other majors or in general education. In this instance, the student has the option of which degree he or she will receive with the major appropriate to that degree. The completion of the additional major will be noted on the student's academic record. The university does not award two degrees to the individual who completes multiple majors in a four-year degree program.

Second baccalaureate degrees:

First degree completed elsewhere, second at Fullerton. Students seeking a bachelor's degree from Fullerton after having received a baccalaureate from another institution may qualify for graduation with the approval and recommendation of the faculty upon completion of the following:

(1) General Education requirements: Students holding a baccalaureate degree from an accredited institution will be held to (a) the breadth requirements of Executive Order 338, i.e. 12 units in each of the areas of arts and humanities, social sciences, and math and science, (b) the statutory requirements and (c) the English Writing Proficiency requirements. Students willnot be held to specific CSUF categories or courses.

- (2) all requirements in the major field of study
- (3) residence and scholarship requirements

Two baccalaureates from Fullerton. With the approval and recommendation of the faculty, a student may qualify for a second baccalaureate under the following circumstances:

- (1) a minimum of 30 units beyond the awarding of the first degree have been earned
- (2) a minimum of 24 upper-division units are included among the 30 units mentioned above
- (3) a minimum of 12 units must be offered by the department in which the second degree is being sought
- (4) two or more degrees may not normally be awarded at the same time

Units included in second baccalaureate programs may not apply to graduate degrees or credential programs.

### Graduation Requirement Check

A candidate for graduation must file an application for a graduation requirements check before the first day of instruction of the semester prior to the semester in which the student expects to graduate. The graduation and diploma fee is required when the application is filed. Application forms are available at the Admissions and Records information counter and in the graduation unit.

Candidates for the baccalaureate should refer to the semester class schedule for application filing dates. A senior should have completed at least 100 units (including the current work in progress) and a substantial portion of the major requirements before requesting a graduation check. If the candidate does not complete the requirements in the semester indicated, a change of graduation date must be filed in the Office of Admissions and Records.

## Faculty Approval and Recommendation

Under provisions of the Academic Senate, the Office of Admissions and Records publishes a list of degree candidates twice a year: in the fall and in the spring (for both spring and summer graduates). After review and approval by the faculty, and upon verification of the completion of requirements, diplomas are issued with the last day of the respective term as the official date of graduation.

Annual commencement exercises are held at the end of the spring semester for those who completed degree requirements mid-year and for those completing degree requirements in the spring semester or summer session. The president of the university, with the authority of the Board of Trustees, confers all degrees, subject to the completion of remaining requirements.

Note: Students completing bachelor degree requirements who wish to continue their studies at the university for postbaccalaureate or graduate degree objectives must apply for admission declaring their new objectives.

California Articulation Number

## General Education

### General Education Objectives

The general education-breadth requirements are designed so that, taken with the major-depth program and electives presented by each baccalaureate candidate, they will assure that graduates have made noteworthy progress toward becoming truly educated persons. Particularly, the purpose of these requirements is to provide means whereby graduates:

- A. will have achieved the ability to think clearly and logically, to find and critically examine information, to communicate orally and in writing, and to perform quantitative functions;
- will have acquired appreciable knowledge about their own bodies and minds, about how human society has developed and how it now functions, about the physical world in which they live, about the other forms of life with which they share that world, and about the cultural endeavors and legacies of their civilization;
- C. will have come to an understanding and appreciation of the principles, methodologies, value systems, and thought processes employed in human inquiries. (Executive Order 338)

## General Education Requirements

All students beginning studies fall 1987 or later must complete a minimum of 51 semester units of general education courses selected in accordance with the pattern designated on the following pages. General education courses must be selected from an approved list and taken for a letter grade. Students should refer to the latest university Schedule of Classes for the most up-to-date list of approved classes. A student who has a break in enrollment for more than one semester in any calendar year may be liable for new catalog requirements.

Students must complete at least nine units of upper-division (i.e. 300- or 400-level) general education course work taken after the student has achieved junior standing (i.e. 60 units). At least nine units of general education must be earned in residence at California State University, Fullerton.

A grade of C or better must be earned for each course in Basic Subjects: Oral Communication (I.A.), Written Communication (I.B.), Critical Thinking (I.C.), Reading (optional) (I.D.), and Mathematics (III.A.4.). All general education courses must be taken on a grade option 1 basis (A, B, C, D, F). An option 2 (credit/no credit) course may be used for general education if that is the only grade option for the course. Consult the course description in the departmental sections of this catalog for grade option information on a specific course.

Courses offered by the department of the student's major may not be used to fulfill the unit requirement of categories III or IV with the exception of categories offering choices from only one department. Courses which are cross-listed meet general education category requirements for all majors except those in the home department of the cross-listed course. The "home" department is the one under which the course description appears in the catalog. For example, Anthropology is the "home" department for Anthropology/Religious Studies 305; hence, it may not be used by an Anthropology major to meet general education requirements. Also, no more than nine units from any single department may be used in meeting the requirements of general education. Upper-division courses offered by the department of the student's major may not be used for general education credit.

At least three (3) semester units of Cultural Diversity course work must be taken from among the asterisked courses in Section IV. At least one laboratory course must be taken from among the courses marked with a dagger (†) in Sections III.A.1., III.A.2., or III.A.3.

Among the following list of requirements a few courses appear in more than one category. These courses may be used to fulfill the requirements of only one, and not both, of the categories within which they appear.

A score of T145 or higher on the English Placement Test (EPT), or completion of English 99 with a grade of C or better, is a prerequisite for enrollment in courses in category I.A.2. Written Communication, for all students except those with an exemption.

A score of 550 or higher on the Entry Level Mathematics (ELM) examination is a prerequisite for enrollment in courses in Category II.A.4. Mathematics for all students except those with an exemption.

## Certification Policy

Under provisions of Title 5 and Executive Order 342, accredited colleges and universities may certify the completion of part of the 48-51 units required in general education. Within the policy of the Board of Trustees, Cal State Fullerton will accept such certification of general education up to a maximum of 39 semester units, but may accept no more in general education than the number of units required in each area.

Transfer students who are certified in any category with fewer than the required units will be subject to additional units and will be permitted to take the additional units in upper-division categories.

## Intersegmental General Education Transfer Curriculum (IGETC)

All lower division Cal State Fullerton general education requirements may be satisfied by the completion in its entirety of this transfer curriculum at another CSU, UC, or community college campus. Information about IGETC is available at each campus.

### California Articulation Number

California State University, Fullerton is authorized to crossreference certain courses with California Articulation Number (CAN). This is a system of equating courses between campuses in California. It is used by an increasing number of community colleges and four-year universities and colleges to identify some of the transferable, introductory courses in several academic disciplines.

The system assures students that CAN courses noted in the catalog of one campus will be accepted in lieu of the comparable CAN course on another participating campus. An example is our Anthropology 101 Introduction to Biological Anthropology; CAN ANTH 2 is accepted in lieu of courses similarly marked in other university or college catalogs.

The California Articulation Numbers are listed in parentheses by the course descriptions in the catalog. A listing of courses currently approved for CAN follows:

California	
Articulation	
Number CANLANTIL 2	Cal State Fullerton Courses
CAN ANTH 2	Anthro 101 Introduction to Biological Anthropology
CAN ANTH 4	Anthro 102 Introduction to Cultural Anthropology
CAN ANTH 6	Anthro 103 Introduction to Archaeology
CAN ART 2	Art 201A Art and Civilization
CAN ART 4	Art 201B Art and Civilization
CAN ART 6	Art 106A Beginning Ceramics
CAN ART 8	Art 107A Beginning Drawing
CAN ART 12	Art 216A Beginning Sculpture
CAN ART 14	Art 103 Two-dimensional Design
CAN ART 16	Art 104 Three-dimensional Design
CAN BIOL 4	Biology 261 Principles of Zoology
CAN BIOL 6	Biology 241 Principles of Botany
CAN CHEM 2	Chemistry 120A General Chemistry
CAN CHEM 4	Chemistry 120B General Chemistry
CAN ECON 2	Economics 202 Principles of Macroeconomics
CAN ECON 4	Economics 201 Principles of Microeconomics
CAN ENGL 2	English 101 Beginning College Writing
CAN ENGL 20	English 206 Introduction to Poetry
CAN ENGR 2	EG-ME 102 Graphical Communications
CAN ENGR 4	EG-ME 202 Material Science
CAN ENGR 6	EG-EE 203 + 203L Electric Circuits and Laboratory
CAN ENGR 8	EG-CE 201 Statics

William (E) animily	english 101 Berinning College
California	
Articulation Number	Cal State Fullerton Courses
	EG-EE 203 Electric Circuits
CAN GEOG 2	Geography 110 Principles of Physical Geography
CAN GEOG 4	Geography 160 Culture and
CAN GEOL 2	Geological Sci 101+
	Geological Sci 101L Physical Geology
CAN GEOL 4	Geological Sci 201 Earth History
CAN GOVT 2	Poli Sci 100 American Government
CAN HIST 8	History 170A United States to 1877
CAN HIST 10	History 170B United States Since 1877
CAN JOUR 2	Comm 101 Writing for the Mass Media
CAN JOUR 4	Comm 233 Mass Communication in
Political SEASSE	Modern Society
CAN MATH 16	Mathematics 125 Precalculus
CAN MATH 18	Mathematics 150A Analytic Geometry and Calculus
CAN MATH 20	Mathematics 150B Analytic Geometry and Calculus
CAN MATH 22	Mathematics 250A Intermediate Calculus: Computer Laboratory
CAN MATH 30	Mathematics 130 A Short Course in Calculus
CAN MATH 34	Mathematics 135 Business Calculus
CAN PHIL 2	Philosophy 100 Introduction to Philosophy
CAN PHIL 6	Philosophy 210 Logic
CAN PHYS 2	Physics 211A and 211AL Elementary Physics + Lab
CAN PHYS 4	Physics 211B and 211BL Elementary Physics + Lab
CAN PHYS 8	Physics 225A and 225AL Fundamental Physics: Mechanics + Lab
CAN PHYS 12	Physics 225B+
ues (6 units mini-	Physics 225BL Fundamental Physics: Electricity and Magnetism and Lab
CAN PSY 2	Psychology 101 Introductory Psycholog
CAN SOC 2	Sociology 101 Introduction to Sociolog
CAN SOC 4	Sociology 102 Social Problems
CAN SPCH 4	Speech Comm 102 Public Speaking
STATES OF THE PROPERTY.	Speech Comm 235 Essentials of
	Argumentation

#### General Education Honors

The General Education Honors Program offers students many of the educational benefits of a small college in the midst of the rich resources of a large university. The program's small class sizes (twenty students maximum) provide challenging learning experiences, individual attention from professors, and closer interaction with other students.

In honors sections of general education courses, students are encouraged to develop and discuss ideas in an active, imaginative and original way. Professors contribute by making creative use of curricular materials and student assignments. They interact personally and intensively with each student and encourage students to interact with each other. These courses do not simply demand a greater quantity of work. They create a learning environment in which students are encouraged to realize their intellectual potential.

The General Education Honors Program gives officially accepted students an opportunity to earn recognition for distinguished academic performance in general education courses. Those participants who successfully complete the requirements for honors in general education will have a notation placed on their transcripts.

#### Entrance to the Program

Academic achievement in high school or college serves as the prerequisite for admission to the honors program. Those eligible for entrance include (1) first-time freshmen with a high school g.p.a. (grade point average) of 3.5 or better and (2) continuing students with a collegiate g.p.a. of 3.0 or better.

Students should declare their intent to pursue the General Education Honors Program by submitting a formal letter of application to the coordinator of the General Education Honors Program. The letter should include the student's name, current address and phone number, high school or college g.p.a., and a paragraph stating the reasons for pursuing the program.

#### **Entrance to Courses**

Individual honors courses are also open to any student who meets the program's g.p.a. standards. Exceptions to this policy may be made with the consent of the honors course instructor and the authorization of the honors program coordinator. First priority for class entrance, however, goes to students formally admitted to the program.

#### Requirements for Completion

Program students are normally expected to average one honors course a semester. These course sections are officially designated in the class schedule by an "H" after the course number.

To complete the honors program, a student must (1) complete 24 units of general education honors courses with a grade of C or better in each course and (2) accomplish a g.p.a. of 3.25 or better for the 24 units of general education honors courses attempted. With approval of the honors program coordinator, up to six units of advanced placement credit with a score of 4 or higher may be substituted for general education honors credit.

Students are responsible for requesting a review of their records to verify completion. Upon verification, a notation will be made on the student's transcript indicating completion of the program.

#### Transfer Course Work

Students transferring into CSUF who have taken honors courses at another accredited institution may apply those courses to the General Education Honors Program.

The following stipulations apply to the transfer of courses:

- 1. The course is used in partial fullfillment of CSUF general education requirements.
- The course is designated and acknowledged as an honors course by the institution where the course was taken.
- 3. The course was completed with a grade of B or better.
- A maximum of nine units of transfer honors courses may be applied toward completion of the honors program.

Any questions concerning the Honors Program should be directed to the coordinator of the General Education Honors Program.

#### I. BASIC SUBJECTS (9 units minimum)

NOTE: A grade of "C" or better is required in sections I.A., I.B., and I.C. and III.A.4.

#### A. Oral Communication (3 units minimum)

Courses in this area are designed to impart skills in the use of human symbolic interaction, focusing on effective speaking.

#### Choices:

Chicano Studies 102	Communication Skills (3)
Speech Comm 100	Introduction to Human
	Communication (3)
Speech Comm 102	Public Speaking (3)
Theatre 110	Oral Communication of Literature (3)

#### B. Written Communication (3 units minimum)

The course in this area is designed to impart skills in organizing, analyzing, and expressing thoughts and concepts in standard written English. Students must satisfy the English Placement Test requirement prior to enrolling in the course.

English 101 Beginning College Writing (3)

#### C. Critical Thinking (3 units minimum)

Courses in this area are designed to develop skills in critical thinking, including the ability to distinguish fact from judgment and belief from knowledge, to reason inductively and deductively, and to understand the formal and informal fallacies of language and thought.

#### Choices:

English 103	Critical Reasoning and Writing (3)
Philosophy 200	Argument and Reasoning (3)
Philosophy 210	Logic (3)
Psychology 110	Reasoning and Problem
ed Scares to 1877 at	Solving (3) 8 Tell V
Reading 290	Critical Reading as Critical
	Thinking (3)
Speech Comm 235	Essentials of Argumentation

## II. HISTORICAL AND CULTURAL FOUNDATIONS (12 units minimum)

A. The Development of Civilization (6 units minimum)

Courses in this area give a holistic view of the development of society — its values, traditions, and institutions.

6th

Anthropology 150A	Western Civilization to the 16th
	Century: A Comparative
A Short Course in	Approach (3)
History 110A	The West and the World to the 10
	Century (3)
History 110B	The West and the World Since th
	16th Century (3)
History 150A	Western Civilization to the 16th
	Century: A Comparative
IIIAL Elementary	Approach (3)
Philosophy 150A	Western Civilization to the 16th
ZITBL - Elementary	Century: A Comparative
Avenuadada serria	Approach (3)
Religious Studies 150A	Western Civilization to the 16th
225AL Fundamental	Century: A Comparative

## B. American History, Institutions and Values (6 units minimum)

Approach (3)

Courses in this section meet Title 5, section 40404, requirements by providing "comprehensive study of American history and American government including the historical development of American institutions and ideals, the Constitution of the United States and the operation of representative democratic government under the Constitution, and the process of state and local government."

# 1. American History (3 units minimum)

Choices:

History 190

Afro-Ethnic 190	Survey of American History with
and physicals inculsion	Emphasis on Ethnic Minorities (3)
American Studies 201	Introduction to American
	Studies (3)
Chicano Studies 190	Survey of American History with
	Emphasis on Ethnic Minorities (3)
History 170A	United States to 1877 (3)
History 170B	United States Since 1877 (3)
History 180	Survey of American History (3)

NOTE: Students who take History 170A must also take History 170B and vice versa.

Survey of American History with Emphasis on Ethnic Minorities (3)

## 2. Government (3 units minimum)

Political Science 100 American Government (3)

NOTE: Transfer students from outside the State of California who have ALREADY completed a basic course in American Government may substitute Political Science 300 Contemporary Issues in California Government and Politics (3) for Political Science 100.

## III. DISCIPLINARY CORE COURSES (21 units minimum)

### A. Mathematics and Natural Sciences (12 units)

At least one laboratory course must be taken in III.A.1., III.A.2., or III.A.3. Approved laboratory courses are indicated with a dagger (†).

## 1. Physical Science (3 units minimum)

Courses in this area provide the content and methodology that form the bases for studies in the physical sciences.

### Choices:

Chemistry 100	Survey of Chemistry (3)
Chemistry 100L†	Survey of Chemistry Lab (1)
Chemistry 115†	Introductory General
	Chemistry (4)
Chemistry 120A†	General Chemistry (5)
Geological Sci 101	Physical Geology (3)
Geological Sci 101L†	Physical Geology Lab (1)
Physics 101	Survey of Astronomy and Physics (3)
Physics 101	Survey of Astronomy and Physics Lab
	(1) resident in The State of the Control of the Con
Physics 211A	Elementary Physics (3)
Physics 211AL†	Elementary Physics Lab (1)

Physics 225A	Fundamental Physics:
	Mechanics (3)
Physics 225AL†	Fundamental Physics: Lab (1)

### 2. Biological Science (3 units minimum)

Courses in this area provide the content and methodology that form the bases for studies in the biological sciences.

## Choices:

Biology	101	Elements of Biology (3)
Biology	101L†	Elements of Biology (1)
Biology	131	Principals of Biology (3)

## 3. Alternatives in Natural Sciences and Mathematics

Courses in this area are topical and thematic specialized inquiries into the contributions of the sciences and mathematics. These courses have a substantial scientific and/ or mathematical content. In addition, they are either introductory to the major subdisciplines or they relate science and/or mathematics to significant social problems or other related disciplines.

#### Choices:

Anthropology 101	Introduction to Biological
	Anthropology (3)
Anthropology 375	Science in Archaeology (3)
Anthropology 440	Human Evolution (3)
Biology 305	Human Heredity &
	Development (3)
Biology 306	Biology of Aging (3)
Biology 310	Human Physiology (3)
Biology 311	Nutrition & Disease (3)
Biology 313	Human Genetics (3)
Biology 314	Human Issues in Genetics (1)
Biology 318	Wildlife Conservation (3)
Biology 319	Marine Biology (3)
Biology 319L†	Marine Biology Lab (1)
Biology 323	Biology of Sexually Transmitted
	Diseases (STD) (2)
Biology 330	Ecology of American Indians (3)
Biology 352	Plants and Life (3)
Biology 353	Principles of Horticulture (2)
Biology 353L†	Principles of Horticulture Lab (1)
Biology 360	Biology Of Human Sexuality (2)
Biology 367	Insects & The Human Ecosystem (3)
Chemistry 111	Nutrition & Drugs (3)
Chemistry 311	Nutrition & Disease (3)
Chemistry 321	Molecules and Life (3)
Computer Sci 313	The Computer Impact (3)
Computer Sci 381	Knowledge Engineering (3)
Geography 110	Principles of Physical Geography (3)
Geography 120	Environment and Change (3)
Geological Sci 120	Introduction to Earth Science (3)

Geological Sci 120L†	Earth Science Lab (1)
Geological Sci 140	Earth's Atmosphere (3)
Geological Sci 201	Earth History (4)
Geological Sci 310	Topics in California Related
	Geology (1-3)
Geological Sci 333	Oceanography (3)
Geological Sci 335	General Hydrology (3)
Geological Sci 340	General Meterology (3)
Geological Sci 376	Applied Geology (3)
History 230	Ascent of Man (3)
History 321	Molecules and Life (3)
History 430	History of Science: Copernicus to the
	Present (3)
Mathematics 338	Statistics Applied to Natural
	Sciences (3)
Mathematics 368	First Course in Symbolic Logic (3)
Philosophy 303	Introduction to Philosophy of
eric specialized inquiries	Science (3)
Philosophy 368	First Course in Symbolic Logic (3)
Philosophy 384	Philosophy of the Physical Sci (3)
Philosophy 386	Philosophy of Biology (3)
Physics 107	Nuclear Energy and Its Impact on
	Society (1)
Physics 200	Introduction to Astronomy (4)
Physics 384	Philosophy of the Physical Sci (3)
Sociology 303	Statistics for the Social
Ballomost	Sciences (3)
Speech Comm 303	Biology of Human
tit i vandanen	Communication (3)

#### 4. Mathematics (3 units minimum)

Courses in this area are designed to provide a basis for understanding mathematical concepts and methodologies and their applications. A grade of "C" or better is required in this section. Students must pass the Entry Level Mathematics (ELM) test before taking any course in this section. No more than four (4) units of lower-division course work may be counted in this section.

## Choices:

Management Sci 361	Probability and Statistical Methods in
	Business & Economics (4)
Mathematics 110	Mathematics for Liberal Arts
	Students (3)
Mathematics 115	College Algebra (4)
Mathematics 120	Introduction to Probability &
	Statistics (3)
Mathematics 125	Precaculus (4)
Mathematics 130	A Short Course in Calculus (4)
Mathematics 135	Business Calculus (3)
Mathematics 150A	Analytic Geometry and
	Calculus (4)

## B. Arts and Humanities (6 units minimum)

## 1. Introduction to the Arts (3 units minimum)

Courses in this area are designed to motivate students to cultivate and refine their affective, cognitive and physical faculties through studying great works of the human imagination.

#### Choices:

Art 101	Introduction to Art (3)
Art 201A	A-t 1 Civilination (3)
Art 201B	Art and Civilization (3)
Art 311	Foundations of Modern Art (3)
A . 212	Modern Art (3)
Dance 101	Introduction to Dance (3)
Music 100	Introduction to Music (3)
Music 101	Music Theory for Non-Music Major
	(3)
Theatre 100	Introduction to the Theatre (3)

## 2. Introduction to the Humanities (3 units minimum)

Courses in this area introduce students to reflective inquiry into the values and subjective responses of civilization in its language, philosophy, and literature.

Anthropology 100 Non-Western Cultures & the Western Tradition (3)

Ancient through Medieval Times (3)

Literature of the Western World from

#### Choices:

Comparative Lit 110

0 . 1. 111	Therein through Wedleval Thines (5)
Comparative Lit 111	Literature of the Western World from
	the Renaissance through the 19th
	Century (3)
Comparative Lit 324	World Literature to 1650 (3)
Comparative Lit 325	World Literature from 1650 (3)
Comparative Lit 373	Masters of Russian Literature (3)
English 110	Literature of the Western World from
	Ancient through Medieval Times (3)
English 111	Literature of the Western World
	from Renaissance through the 19th
	Century (3)
English 200	Introduction to Literature (3)
English 311	Masters of British Literature to
	1760 (3)
English 312	Masters of British Literature from
	1760 (3)
English 321	American Literature to Whitman (3)
English 322	American Literature from Twain to the
	Moderns (3)
Foreign Lang 101	Fundamental Foreign Languages (3-5)
Foreign Lang 102	Fundamental Foreign Languages (3-5)
Foreign Lang 203	Intermediate Foreign Languages (3-5)
Foreign Lang 204	Intermediate Foreign Languages (3-5)

French 103	Intensive Review of Fundamental
	French (5)
French 213	Intermediate Diction and
	Phonetics (2)
French 214	Intermediate Conversation and
	Composition (2)
German 213	Intermediate Reading (2)
German 214	Intermediate Reading (2)
Japanese 105	Intensive Review of Fundamental
Theates 411 (1) 245	Japanese (5)
Linguistics 106	Language and Linguistics (3)
Linguistics 301	Sanskrit (4)
Spanish 105	Intensive Review of Fundamental
2. Implications and ton	Spanish (5)
Spanish 201	Spanish for Spanish Speakers (3)
Spanish 213	Intermediate Conversation (2)
Spanish 214	Intermediate Composition (2)
Philosophy 100	Introduction to Philosophy (3)
Philosophy 110	The World's Great Religions (3)
Philosophy 115	Western Philosophy to 1600 (3)
Philosophy 116	Western Philosophy since 1600 (3)
Philosophy 290	History of Philosophy: Greek
	Philosophy (3)
Philosophy 300	History of Philosophy: Rationalism
	and Empiricism (3)
Philosophy 310	Ethics (3)
Religious Studies 101	Fundamental Hebrew-A (4)
Religious Studies 102	Fundamental Hebrew-B (4)
Religious Studies 110	The World's Great Religions (3)
Religious Studies 200	Introduction to Christianity (3)
Religious Studies 210	Introduction to Judaism (3)
Religious Studies 301	Sanskrit (4)

#### C. Social Sciences (3 units minimum)

### 1. Introduction to the Social Sciences (3 units minimum)

Courses in this area provide an introduction to the conceptual and methodological aspects of the social sciences to human, social, political, and economic institutions and behavior in their contemporary and historical settings.

#### Choices:

	Introduction to American Culture
A day of the transport	Studies (3) 14 (10) Authors another A
Anthropology 102	Introduction to Cultural
	P
Economics 100	The Economic Environment (3)
Economics 201	Principles of Microeconomics (3)
Economics 210	Principles of Economics (5)
Geography 100	World Geography (3)
Political Sci 200	Introduction to the Study of
	Politics (3) H. APAL solber 2 suoralla A
Psychology 101	Introductory Psychology (3)
Sociology 101	Introduction to Sociology (3)

## IV. IMPLICATIONS, EXPLORATIONS AND LIFE-LONG LEARNING

(9 units minimum)

At least one asterisked (\*) course in IV. must be taken. Asterisked courses fulfill the cultural diversity requirement. Cultural diversity courses are designed to enhance understanding of cultural differences within or between western and/or non-western societies.

Comparably Lind 12 A The Bibles

## A. Implications and Explorations (6 units minimum)

## 1. Implications, Explorations and Participatory Experience in the Arts and Humanities (3 units minimum)

Courses in this area deepen the appreciation of the content of III.B.1. and III.B.2. O of noncombound Child (3) collaboration

Afro-Ethnic 314 Pan-African Dance and

## Choices: SembigortA ad Proportional Chacano (3) 028 dallyn3

	Movement (3)*
Afro-Ethnic 320	Black American Intellectual
Afro-Ethnic 381	African Literature (3)
Afro-Ethnic 403	Oral History of Ethnic
	America (3)* Techniques of 44 dailynd
Afro-Ethnic 424	Afro-American Literature (3)
Afro-Ethnic 437	American Indian Religions and
	Philosophy (3)
Afro-Ethnic 460	Afro-American Music
	Appreciation (3)*
Anthropology 104	Traditional Cultures of the World (3)*
Anthropology 305	Anthropology of Religion (3)*
Anthropology 306	Comparative Aesthetics and
Literary Forms (3)	
Art 100	Exploratory Course in Art (3)
Art 103	Two-dimensional Design (3)
Art 104	Three-dimensional Design (3)
Art 106A	Beginning Ceramics (3)
Art 107A	Beginning Drawing (3)
Art 107B	Beginning Painting (3)
Art 205A	Beginning Crafts (3)
Art 216A (8) 2019	Beginning Sculpture (3)
Art 326A	Ceramic Sculpture (3)
Art 338A	Creative Photography (3) 184 violated
Art 364A	Stained Glass (3)
Chicano Studies 302	Ancient Mexican Culture (3)*
Chicano Studies 304	Music of Mexico (3)* [44 solitalingmi.]
Chicano Studies 315	Chicano/Latino Theatre (3)*
Chicano Studies 316	The Chicano Music Experience (3)*
Chicano Studies 336	Main Trends in Spanish-American
	Literature (3)
Chicano Studies 337	Contemporary Chicano Literature (3)
Chicano Studies 430	The Evolution of Mexican TOR SIZEM
	Literature (3)

Chicano Studies 433	Mexican Literature Since 1940 (3)	Music 302	History of Jazz (3)*
Chicano Studies 440	Mexican Intellectual Thought (3)*	Music 303	Ethnic Music (3)* Ethnic Music (3)*
Communications 383	World Cinema (3)	Music 304	Music of Mexico (3)*
Comparative Lit 312	The Bible as Literature (3)	Music 352	Symphonic Music in Western and
Comparative Lit 315	Classical Mythology in World		Eastern Cultures (3)*
household to a company of	Literature (3)	Music 355	Film Music (3)
Comparative Lit 374	Soviet Literature (3)	Music 361A	Symphony Orchestra (1)
Comparative Lit 380	Introduction to Asian Literature (3)*	Music 361B	University Choir (1)
Comparative Lit 381	African Literature (3)	Music 361C	Symphonic Band (1)
Comparative Lit 423T	Topics In Asian Literature (3)*	Music 361D	Opera Theatre (1)
Dance 112	Beginning Classical Ballet (2)	Music 361E	University Singers (1)
Dance 122A	Beginning Modern Dance (2)	Music 361F	University Wind Ensemble (1)
Dance 126	Dance Improvisation (2)	Music 361W	Women's Choir (1)
Dance 132	D : : 1 D (2)	Music 362B	Varsity Band (1)
Dance 301	Dance and Cultural Diversity (3)*	Music 362D	Percussion Ensemble (1)
Dance 325	Dance Theory and Criticism (3)	Music 362E	Brass Ensemble (1)
English 105	Introduction to Creative Writing (3)	Music 362L	Jazz Ensemble (1)
English 204	Intermediate Creative Writing (3)	Music 362M	Horn Ensemble (1)
English 320	Literature of the American	Music 362S	Jazz Ensemble II (1)
	Indians (3)* .	Music 362X	Beginning Opera Techniques (1)
English 323T	Cultural Pluralism in American	Music 363B	Chamber Ensemble Brass (1)
	Literature (3)*	Music 363G	Chamber Ensemble Guitar (1)
English 381	African Literature (3)	Music 363J	Jazz Combo (1)
English 424	Introduction to Afro-American	Music 363K	Chamber Ensemble Keyboard (1)
	Literature (3)	Music 363S	Chamber Ensemble Strings (1)
English 433	Children's Literature (3)	Music 363W	Chamber Ensemble Woodwind (1)
English 441	Linguistics & Literature (3)	Music 363X	Chamber Ensemble Saxophone (1)
	Origins of Modern France (3)*	Philosophy 312	Business & Professional Ethics (3)
French 375	Introduction to Literature (3)	Philosophy 314	Medical Ethics (3)
German 315	Introduction to German	Philosophy 323	Existentialism (3)
	Civilization (3)*	Philosophy 350	Oriental Philosophy (3)*
German 335	Introduction to Literature (3)	Political Sci 331	Comparative Third World Politics
Japanese 315	Introduction to Japanese		Through Literature (3)
(\$) mby 15/A3	Civilization (3)*	Political Sci 340	Political Philosophy (3)
Japanese 316	Modern Japan (3)*	Religious Studies 250	The Religion of Islam (3)*
Japanese 375	Introduction to Literary Forms (3)	Religious Studies 270T	Introduction to the Oriental
Portuguese 320	Introduction to Luso-Brazilian Culture		Religions (3)*
(1) nguas(1.4)	and Civilization (3)*	Religious Studies 305	Anthropology of Religion (3)*
Spanish 315	Introduction to Spanish	Religious Studies 345A	History and Development of Christian
(t) soin	Civilization (3)* Advi mA		Thought: The Beginning to 1274 (3)
Spanish 316	Introduction to Spanish-American Civilization (3)*	Religious Studies 345B	History and Development of Christian Thought: 1275 to the Present (3)
	Introduction to Literary Forms (3)	Religious Studies 346A	History and Development of Jewish
	History of The Jews (3)		Thought: Biblical Origins to
	History of India (3)*		Maimonides (3) 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	American Religious History (3)	Religious Studies 346B	History and Development of Jewish
Library 200	THE COLL I. AND A	Cidenal	Thought: 1204 to the Present (3)*
	Investigation (3)	Religious Studies 347A	History and Development of Hinduism
Linguistics 441			
	Voice Class for Non-Music Majors (1)		History and Development of Hinduism
	Piano Class for Non-Music Majors (1)		from 1200 (3)*
	Piano Class for Non-Music Majors (1)	Religious Studies 349A	History and Development of Islamic
Music 185A	Guitar class for Non-Music Majors (1)	Policious Studios 240P	Thought: The Beginning to 1258 (3)
Music 185B Music 301	Guitar class for Non-Music Majors (1) Techniques of Song Writing (3)	Kengious Studies 349B	History and Development of Islamic Thought: 1259 to Modern Times (3)

Major Christian Traditions (3)
History of the Jews (3)
Acting for Non Majors (3)
Costume Fundamentals (3)
Oral Interpretation of Shakespeare (3)
Oral Interpretation of Prose
Literature (3)
Oral Interpretation of Poetry (3)
Oral Interpretation of Drama (3)
Oral Interpretation of Children's
Literature (3)

## 2. Implications and Explorations in the Social Sciences (3 units minimum)

Courses in this area are topical and thematic, specialized inquiries into the contributions of the social sciences to the understanding of human behavior, both within and across traditional disciplines.

Afro-Ethnic 101	Introduction to Ethnic Studies (3)*
Afro-Ethnic 107	Introduction to Afro-American Studies (3)*
Afro-Ethnic 220	The Indian in American History (3)*
Afro-Ethnic 280	Afro-American History (3)*
Afro-Ethnic 301	Afro-American Culture (3)*
Afro-Ethnic 309	The Black Family (3)*
Afro-Ethnic 310	Black Women in America (3)*
Afro-Ethnic 311	Intracultural Socialization
Ano-Lunic 311	Patterns (3)*
Afro-Ethnic 312	American Indian Women (3)*
Afro-Ethnic 317	Black Politics (3)*
Afro-Ethnic 325	African American Religion (3)*
Afro-Ethnic 335	History of Racism (3)*
Afro-Ethnic 346	The African Experience (3)*
Afro-Ethnic 385	Schools and Minority Groups (3)
Afro-Ethnic 422	Psychology of the Afro-American (3)*
Afro-Ethnic 430	
	Ethnic Minority Behavior (3)*
American Studies 300	Introduction to American Popular Culture (3)
American Studies 301	The American Character (3)*
American Studies 345	The American Dream (3)
American Studies 411	The White Ethnic in America (3)*
American Studies 450	Women in American Society (3)*
Anthropology 103	Introduction to Archaeology (3)
Anthropology 300	Language and Culture (3)
Anthropology 321	The American Indian (3)*
Anthropology 325	Peoples of South America (3):
Anthropology 327	Origins of Civilizations (3)
Anthropology 328	Peoples of Africa (3)*
Anthropology 340	Peoples of Asia (3)*

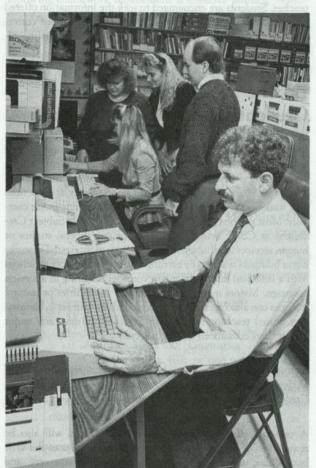
Anthropology 345	Peoples of the Middle East & North
	Africa (3)*
Anthropology 347	Peoples of the Pacific (3)*
Anthropology 360	Contemporary American Culture (3)*
Anthropology 409	Applied Anthropology (3)
Anthropology 410	Urban Anthropology (3)
Anthropology 413	Culture and Personality: Psychological
California Stille CayVe	Anthropology (3)
Anthropology 450	Culture and Education (3)
Anthropology 460	Public Archaeology in California (3)
Chicano Studies 106	Introduction to Chicano Studies (3)*
Chicano Studies 220	Mexican Heritage (3)*
Chicano Studies 305	The Chicano Family (3)*
Chicano Studies 403	Cultural Differences in Mexico & the
THE hand house a morning V.	Southwest (3)*
Chicano Studies 406	La Chicana (3)*
Chicano Studies 431	The Chicano Child (3)*
Chicano Studies 432	The Chicano Adolescent (3)*
Chicano Studies 445	History of the Chicano (3)*
Chicano Studies 450	The Chicano and Contemporary
Cincario otdaics 450	Issues (3)*
Chicano Studies 453	Mexico Since 1906 (3)*
Chicano Studies 460	The Chicano and Politics (3)*
Child Dev 312	Human Growth & Development (3)
Communications 233	Mass Communication in Modern
Communications 255	Society (3)
Counseling 380	Theories and Techniques of
Counseling 500	Counseling (3)
Criminal Justice 300	Introduction to Criminal Justice (3)
Economics 201	Principles of Microeconomics (3)
Economics 202	Principles of Macroeconomics (3)
Economics 330	Comparative Economic Systems (3)
Economics 331	The Soviet Economy (3)
Economics 332	Economics of the Pacific Rim (3)
Economics 333	Economic Development: Analysis &
	Case Studies (3)
Economics 334	Economics of Latin America & the
	Caribbean (3)
Economics 350	American Economic History (3)
Economics 361	Urban Economics (3)
Economics 362	Environmental and Resource
the are refer by Vythous yas	Economics (3)
Geography 160	Culture and Environment (3)
Geography 170	The City (3)
Geography 332	United States and Canada (3)*
Geography 333	Latin America (3)*
Geography 340	Asia (3)
Geography 344	Africa (3)*
Geography 346	The Pacific World (3)
Geography 350	Conserv & Ecology in America (3)
Geography 366	Geography of Religion (3)
History 270 (E) ASSOCIATION	Women in American History (3)*
History 330	History of Economic Development in
Thistory 550 th thinks	the First and Third Worlds (3)
History 350	History of Latin American
ristory 550	Civilization (3)*
	Speech Commission land intercultural Co

History 360	Modern Asia: Nationalism & Revolutionary Change (3)*	B. Life-Long Learning
History 452	20th Century Brazil (3)*	Courses in this section
History 455	Latin America Since 1945 (3)	being as an integrated
History 477	American Sex Reformers (3)	organism. They may al
History 489A	Amer Social History, 1750-1860 (3)	of the general education
The state of the s		
History 489B	Amer Social History, 1865-1930 (3)	ion of Prosector.
Human Services 311	Intracultural Socialization Patterns (3)*	Choices:
Human Services 380	Theories and Techniques of Counseling (3)	American Studies 450 Anthropology 415
Linguistics 108	Linguistics and Minority Dialects (3)*	Anthropology 417
Linguistics 369	Language, Sex Roles & the Brain (3)	Anthropology 432
Linguistics 412		Tindhopology 152
Music 305	Women in Music (3)*	Anthropology 442
Philosophy 302	Introduction to Women's Studies (3)*	
		Biology 306
Philosophy 341	Assumptions of Psychotherapy (3)	Biology 311
Philosophy 385	Philosophy of Social Sciences (3)	Biology 360
Physical Ed 381	Human Movement in Cultural	Chemistry 111
Waste . Little amount	Perspective (3)	Chemistry 311
Political Sci 300	Contemporary Issues in California	Child Dev 312
	Government and Politics (3)	Child Dev 330
Political Sci 309	Introduction to Metropolitan	Chicano Studies 305
	Politics (3)	Comparative Lit 355T
Political Sci 310	American Political Behavior (3)	Ed Sec 386
Political Sci 315	American Policy-Making Process (3)	English 355T
Political Sci 317	Black Politics (3)*	English 356
Political Sci 320	Politics, Policy and Administration (3)	Geography 357
Political Sci 330	Comparative Political Analysis (3)	Ocograpii, 551
Political Sci 350	World Politics (3)	Health Science 101
Political Sci 352	American Foreign Policy (3)	Health Science 301
Political Sci 375	D. L1: - I (2)	Health Science 321
Political Sci 445		
Political Sci 445	Political Learning and	Health Science 342
D-1:	Socialization (3)	Human Services 300
Political Sci 460	The Chicano and Politics (3)*	Music 350
Political Sci 481	Religion and Politics in the American	Nursing 301
p Paral Carronne	Experience (3)	Nursing 302
Psychology 311	Educational Psychology (3)	(17) 11911111/04 (1
Psychology 312	The Psychology of Human Sexual	Nursing 303
inn America ox the		Philosophy 312
Psychology 331	Psychology of Personality (3)	Philosophy 324
Psychology 341	Abnormal Psychology (3)	Physical Ed. 342
Psychology 350	Environmental Psychology (3)	Physical Ed. 350
Psychology 351	Social Psychology (3)	(F) Incompany A soni A
Psychology 361	Developmental Psychology (3)	Political Science 344
Psychology 362	Psychology of Aging (3)	
Religious Studies 366	Geography of Religion (3)	Psychology 312
Religious Studies 481	Religion and Politics in the American	marger apprents
Properties . *IE	Experience (3)	Psychology 361
Sociology 133	Introduction to Gerontology (3)	Psychology 362
Sociology 361	Population Problems (3)	Religous Studies 380
Sociology 371	Urban Sociology (3)	
Sociology 407	Women in Contemporary Society (3)	Secondary Ed 386
	Minority Group Relations (3)*	Sociology 341
Sociology 436		Sociology 450
Sociology 450	Sociology of Sex Roles (3)	Sociology 451
	Sociology of the Family (3)	Sociology 460
	Medical Sociology (3)	Speech Comm 345
Sociology 456	그 이 경기를 가는 것이 되었다. 그는 것이 없는 것이 없다.	opecen Condi 545
Sociology 465	Law and Society (3)	
	The second secon	. (6)
Speech Comm 320	Intercultural Communication (3)*	

## ng (3 units minimum)

on facilitate understanding of the human d physiological, social, and psychological also integrate major areas of earlier portions on program (Sections II. through IV.A.2.).

	TOTAL CONTRACTOR OF THE PERSON
American Studies 450	Women in American Society (3)*
Anthropology 415	Culture and Nutrition (3)
Anthropology 417	Life Quests (3)
Anthropology 432	Women in Cross-Cultural
Mauc 351 W	Perspective (3)
Anthropology 442	Medical Anthropology (3)
Biology 306	Biology of Aging (3)
Biology 311	Nutrition and Disease (3)
Biology 360	Biology of Human Sexuality (1)
Chemistry 111	Nutrition and Drugs (3)
Chemistry 311	Nutrition and Disease (3)
Child Dev 312	Human Growth and Development (3
Child Dev 330	Adolescence & Early Adulthood (3)
Chicano Studies 305	The Chicano Family (3)*
Comparative Lit 355T	Images of Women in Literature (3)
Ed Sec 386	Adolescence (3)
English 355T	Images of Women in Literature (3)
English 356	The Literature of Aging (3)
Geography 357	Social Geography: Perception &
	Behavior (3)
Health Science 101	Personal Health (3)
Health Science 301	Promotion of Optimal Health (3)
Health Science 321	Drugs and Society (3)
Health Science 342	
Human Services 300	Character and Conflict (3)
Music 350	Music in Our Society (3)
Nursing 301	Promotion of Optimal Health (3)
Nursing 302	Health Delivery System and the
an Women (1)	Consumer (3)
Nursing 303	Women's Health and Healing (3)
Philosophy 312	Business & Professional Ethics (3)
	Existential Group (3)
Physical Ed. 342	Stress Management (3)
Physical Ed. 350	Physical Activity & Lifelong
the Airo American (3)	Well-being (3)
Political Science 344	Aids: Politics, Policy and
"(Elizabeth y	Management (3)
Psychology 312	The Psychology of Human Sexual
	Behavior (3)
Psychology 361	Developmental Psychology (3)
Psychology 362	Psychology of Aging (3)
Religous Studies 380	The Religious Roots of
*/// company to continu	Non-Violence (3)
Secondary Ed 386	Adolescence (3)
Sociology 341	Social Interaction (3)
Sociology 450	Sociology of Sex Roles (3)
Sociology 451	Sociology of the Family (3)
Sociology 460	Sociology of Death and Dying (3)
Speech Comm 345	Communications and Aging (3)
	Archive block 323 of Peoples of Am



# Teaching Credential Programs

California State University, Fullerton offers a full range of Stateapproved credential programs leading to careers in education. From its earliest days to the present, this has been one of the chief missions of the university. Pursuing a teaching credential in California is a complicated matter because of the number of specific requirements that must be met. Credential requirements are established by the Legislature and enforced by the Commission on Teacher Credentialing (CTC). This commission also reviews and approves all credential preparation programs, such as those at the university. An academic major in education is not permitted in California, thus students seeking teaching credentials must do so in conjunction with, or after the completion of, a baccalaureate degree program in an academic area outside of education. CSUF offers programs leading to basic teaching credentials, specialist credentials, and services credentials. The specialist and services credentials, described briefly below, are more advanced programs designed to be taken in conjunction with graduate study.

In this section of the catalog information is presented regarding:

- A. Basic Credential Programs
- B. The Multiple Subject Credential and Waiver Program
- C. The Single Subject Credential and Waiver Programs
- Supplementary Authorizations for the Basic Teaching Credentials
- E. Specialist and Services Credentials

## A. Basic Credential Programs

In California there are two basic teaching credentials, the Multiple Subject Credential and the Single Subject Credential. The Multiple Subject Credential authorizes a person to teach in a classroom where many different subjects are taught by a single individual, such as in elementary schools. The Single Subject Credential authorizes a teacher to teach in a classroom where only one subject is taught, such as a classroom in departmentalized high schools and some junior high schools. Thus the person interested in elementary school teaching should pursue the program designed for the Multiple Subject Credential, and the person interested in teaching a specific subject at the junior high or high school level should pursue the program for the Single Subject Credential.

In California a person can earn first a *preliminary* and then a professional *clear* basic teaching credential. The requirements for the professional clear credential are built on those for the preliminary credential. The preliminary credential is the level that authorizes beginning teaching.

## Minimum Requirements for a Preliminary Multiple or Single Subject Credential

Although it is possible to complete the minimum requirements for a preliminary basic teaching credential in four years, it generally takes a good student with accurate academic advising about four and a half years full time to complete all the requirements for a preliminary basic teaching credential and a baccalaureate degree. The minimum requirements for a preliminary basic credential include:

- 1. A baccalaureate degree in a field other than professional education from a regionally accredited college or university.
- 2. An approved program of professional preparation, including supervised student teaching. A two semester program may be taken during the fourth and/or fifth year of study. Cal State Fullerton offers State approved professional preparation programs through the School of Human Development and Community Service. An alternative plan is the three semester Intern Credential Program, which combines one semester of supervised student teaching and coursework. This alternative is offered in both Multiple Subject and Multiple Subject with a Bilingual Emphasis Credential Programs. Further information about these programs, including admission and prerequisite requirements, is provided in this catalog under the Department of Elementary and Bilingual Education, and the Secondary Teacher Education Program.
- 3. Passage of the California Basic Education Skills Test (CBEST), a test of reading, writing, critical thinking and mathematics skills. CSUF is one of the State-approved testing centers for this examination as well as for other examinations used in the teacher credentialing process.
- 4. Demonstration of subject matter knowledge appropriate to the specific credential being authorized. This can be achieved either by passing a State-approved subject matter examination (for the Multiple Subjects Credential this test is the NTE Multiple Subjects Assessment for Teachers [MSAT]) or by completing a State-approved examination Waiver Program. Cal State Fullerton offers Waiver Programs for the Multiple Subject subject matter examination and for 14 Single Subject examination areas. These programs are described in more detail below.
- 5. Satisfactory completion of at least two semester units of work on the provisions and principles of the U.S. Constitution or passage of an examination on this area.
- 6. Demonstration of a knowledge of the various methods of teaching reading.

To help ensure that all credential requirements are met with a minimum of difficulty, it is essential that people seek sound academic advising as soon as possible. The Office of Admissions to Teacher Education.

located in Education Classroom 207, provides information on waiver program advising and specific credential requirements, details on procedures for admission to the professional program in teacher preparation, information on preprofessional prerequisites, and advice on a number of other important matters of concern to students interested in the possibility of becoming a teacher. Students are encouraged to seek the information offered by this Office by attending an overview at their earliest convenience. Schedules for overviews may be obtained by dialing extension 2111.

# B. The Multiple Subject Credential and Waiver Program

In California Professional Teacher Preparation is a two- or threesemester program taken during the fourth and/or fifth year of college; there is no major in education. Since students will be devoting their first three years of work to completing general education, major and waiver program requirements, it is essential that students consider their selection of an academic major carefully. Most persons interested in earning a Multiple Subject Credential at CSUF select child development, liberal studies or human services as an academic major. Persons interested in working as bilingual teachers by earning a Multiple Subject Credential with a Bilingual Emphasis, might consider majoring in a foreign language. Majors in the social sciences, humanities or natural sciences can also be excellent backgrounds for careers in elementary school teaching. According to California law, any major (other than education) can be selected.

Transfer students and students interested in qualifying for a CSUF waiver program should seek a transcript evaluation from the Credential Preparation Center, Education Classroom 207.

A person seeking a Multiple Subject Credential will also be required to demonstrate a broad general knowledge of the arts, humanities, social sciences, mathematics, language arts, and natural sciences. There are two ways to demonstrate that knowledge: one is by passing a State-approved examination, NTE (MSAT), the other is by completing the CSUF State-approved Multiple Subject Waiver Program.

A student evaluated under an earlier waiver program retains the option of being evaluated under subsequent waiver programs.

# Multiple Subject Waiver

The specific requirements of the CSUF waiver program are subject to change by the California Commission on Teacher Credentialing. Students wishing to complete waiver requirements as stipulated below must receive an official waiver evaluation through procedures established by the Credential Preparation Center located in the Education Classroom Building, Room 207.

All students who began a previously approved Multiple Subjects Waiver Program prior to September 1, 1991 and who have documented advisement as of that date, may complete the waiver if they can do so by June 30, 1996. A grade of C or better is required in all classes used to meet waiver program requirements. The following coursework requirement is effective January, 1991.

## 1. Language and Literature (21 units minimum)

1.1 Composition (6 units minimum)

1.11 Completion of the "Written Communication" requirement of the campus general education

1.12 Any course approved by the University Board on Writing Proficiency as meeting the upper division writing requirement

1.2 Literature (6 units minimum)

\*1.21 Children's literature (3 units minimum) — one of the following: English 433 or Theatre 411

1.22 Literature (3 units minimum) — one of the following: Chicano Studies 336, 337, 430 or 433; or Comparative Literature 111 or 325; or English 200, 311, 312, 321, 322 or 352

1.3 Speech (3 units minimum) — Completion of the "Oral Communication" requirement of the campus general education program

1.4 Language acquisition (6 units minimum)

\*1.41 Grammar: English 303

1.42 Language acquisition — one of the following: Anthropology 300; Linguistics 106; Speech Communication 403; or one semester college level study of a modern foreign language

1.5 Interdisciplinary Studies (optional): Speech Communication 305 (NOTE: Students completing this course may waive section 1.42)

#### 2. Mathematics (9 units minimum)

2.1 Completion of the "Mathematics" requirement of the campus general education program

\*2.2 Math education: Mathematics 303A and 303B

## 3. Science (15 units minimum) (E) valence

3.1 Completion of the "Biological Science" requirement of the campus general education proram

3.2 Completion of the "Physical Science" requirement of the campus general education program

3.3 Completion of the laboratory requirement of the campus general education program

3.4 Other coursework to complete the GE mathematics and natural sciences requirement (2 units minimum)

\*3.5 Science Education (6 units minimum) Science Education 310

Science Education 453

## 4. Social Sciences and History (21 units minimum)

4.1 U.S. government/political science (3 units minimum) — completion of the "Government" requirement of the campus general education program

4.2 American History (3 units minimum) — completion of the "American History" requirement of the campus gen-

eral education program

4.3 World History and Culture (3 units minimum) — one of the following: Anthropology 100; or History 110A, 110B, 303A, 303B, 400A or 400B

4.4 Geography (3 units minimum) — one of the following:

Geography 100 or 160

- 4.5 Economics (3 units minimum) one of the following: Economics 100, 201, 202 or 210; or Geography 360; or Political Science 457
- 4.6 Anthropology/Psychology/Sociology (3 units minimum) — one of the following: Anthropology 102; or Psychology 101; or Sociology 101
- 4.7 Cultural Diversity in the Social Sciences (3 units minimum) — one of the following GE cultural diversity classes:

Afro-Ethnic Studies 309 or 311; or American Studies 301; or Anthropology 432 or 450; or Chicano Studies 305 or 431; or Sociology 431; or Speech Communication 320

4.8 Interdisciplinary Studies (optional): Liberal Studies 308 (NOTE: Students completing this course may waive section 4.5 or 4.6)

# 5. Humanities (9 units minimum)

5.1 Logic (3 units minimum) — completion of the "Critical Thinking" requirement of the campus general education

5.2 Philosophy/Ethics/Classics (3 units minimum) — one of the following: Latin 101; or Comparative Literature 110, 315, 320 or 324; or History 415A, 415B, 417A or 417B; or Philosophy 100, 115, 116, 290, 300 or 310

5.3 Comparative Arts (3 units minimum) — one of the following: American Studies 395; or Anthropology 306; or Dance 301; or Liberal Studies 306; or Music 350 or 352; or Theatre 402A

## 6. Visual and Performing Arts (12 units minimum)

- 6.1 Completion of the "Introduction to the Arts" requirement of the campus general education program
  - \*6.2 Children's art (3 units minimum) must take Art 380
  - \*6.3 Children's music (3 units minimum) one of the following: Music 333 or 433
- \*6.4 Children's theatre and dance one of the following: Dance 471 or Theatre 402A and analogous and age

<sup>\*</sup>Assessment Portfolio Courses

## 7. Health and Movement (6 units minimum)

- \*7.1 Health (3 units minimum) must take Health Science
- \*7.2 Movement for children (3 units minimum) Physical Education 372

## 8. Human Development (3 units minimum)

\*8.1 Child Development 325

## 9. Field Experience (0-3 units)

9.1 Elementary Education 315A and 315B (or equivalent experience)

The above waiver program has been designed for maximal compatibility with the campus general education program. Nevertheless, good academic advising and careful course selection each semester are essential if a person is to complete major requirements, waiver requirements and general education requirements with the least amount of difficulty.

# C. Single Subject Credentials and Waiver Programs

Although a person seeking a Single Subject Credential may complete any academic major, most people decide to complete the degree major closest to the subject field in which they wish to be authorized to teach. CSUF offers a Single Subject Credential program in each of the following 14 State-authorized subject fields:

Business Education

English (English, Speech, Theater)

French
German

Government (Political Science)

History MA to Collegible mechanic tenswollow

Life Science (Biology)

Mathematics

Music

Physical Education (1) and primately bas least to

Physical Sciences (Chemistry, Geology and Physics)

Social Sciences (Anthropology, American Studies, Economics, Geography, Chicano Studies, History, Afro-Ethnic Studies, Psychology and Sociology) Spanish (Manufacture C) States (1991) Inc.

To demonstrate subject matter competence a person must either pass the appropriate State-approved examination, or complete a State-approved waiver program. These waiver programs generally coincide sufficiently with the degree major to make it possible to complete major requirements and waiver requirements using many of the same courses. But degree programs and waiver programs serve different purposes; taking one is not a guarantee that you will have satisfied the requirements of the other. Good advising and careful planning are crucial. Transfer students seeking a CSUF waiver should seek a transcript evaluation from the Credential Preparation Center, Education Classroom 207. The CSUF waiver programs for each of the Single Subject fields listed above are presented below:

## SINGLE SUBJECT WAIVER: ART

Core Requirements in Subjects Commonly Taught (36 units)

Art 103	Two-dimensional Design (3)
Art 104	Three-dimensional Design (3)
Art 106A	Beginning Ceramics (3)
Art 107A,B	Beginning Drawing and Painting (6)
Art 117	Life Drawing (3)
Art 201A,B	Art and Civilization (6)
Art 205A	Beginning Crafts (3)
Art 207A	Drawing and Painting (3)
Art 310A	Watercolor (3)
Art 312	Art of the 20th Century 1900 to
	Present (3)

## Breadth and Perspective Requirements (15 units)

Students select one of the following areas of emphasis

Drawing, Painting and General Art

Art 207B Drawing and Painting (3) Printmaking-Etching (3) Art 347

Art 307A,B Advanced Drawing and Painting (6)

Life Studies: Draw, Paint and Art 317

Sculpting (3)

#### Crafts and Ceramics

Beginning Crafts: Wood (3) Art 205B Advanced Crafts (3) Art 305A Art 306A.B Advanced Ceramics (6) Jewelry (3) (munimum silau čl.) Science (15 units minimum) Art 315A

## SINGLE SUBJECT WAIVER: BUSINESS **EDUCATION**

Core Requirements in Subjects Commonly Taught (30-33 units)

(All students must meet the following core requirements. In addition, each student must meet the requirements of one of the four specializations which are: accounting, marketing, economics, and office administration.)

<sup>\*</sup>Assessment Portfolio courses.

## Demonstration of Typewriting Proficiency

(Proficiency Exam: (1) five-minute timed writing; minimum score 40 words gross per minute with five errors maximum, and (2) demonstration of problem-solving ability: Setting up a business letter, tabulation problem and rough-draft material from unarranged copy and in mailable/usable form and (3) passing a written exam covering correct form and style (including punctuation, syllabication, and grammar) applicable to typewriting skill.)

## Computers and Related Technologies:

Demonstration of Keyboarding Proficiency on Computer (Proficiency Exam: (1) Five-minute timed writing; minimum score 40 words gross per minute with 5 error maximum and written exam covering correct form and style (including punctuation, syllabication, and grammar) applicable to keyboarding skill.)

Demonstration of Computer Proficiency

(Proficiency Exam: Word Processing, Data Base, and Spreadsheet: (1) Complex business letter, containing tabulation on a microcomputer in mailable form, (2) data base generating reports and labels, and (3) business spreadsheet.)

Students pursuing a single subject waiver must take all of the following: (15 units)

Economics 201	Principles of Microeconomics (3)**
Economics 202	Principles of Macroeconomics (3)**
Accounting 201A,B	Elementary Accounting (6)
Management 246	Business Law (3)

#### One of the following: (3 units)

Manag Sci 263	Intro to Information Systems and
	Micro-Computer Applications (2) and
Manag Sci 264	Intro to Computer Programming (2) or
Manag Sci 265	Introduction to Information Systems
	and Computer Programming (3) or
Computer Sci 112	Introduction to Computer
	Programming (3)

## All of the following: (9 units)

Business Admin 301	Business Writing (3)
Finance 310	Personal Financial
	Management (3)
Marketing 351	Principles of Marketing (3)

## And one area of specialization: (3-6 units)

### Accounting Specialization\*

Accounting 301A,B Intermediate Accounting (6)

## Marketing Specialization\*

Marketing 352	Principles of Retailing (3)
Marketing 370	Consumer Behavior (3)

#### Economics Specialization\*

Economics 310	Intermediate Microeconomic Analysis
	(3)
Economics 320	Intermediate Macroeconomic Analysis
	Theatre 477B Senior Senior Sec (E) in

### Office Administration Specialization\*

### Demonstration of Shorthand Proficiency

(Proficiency Exam: Ability to take dictation at a minimum of 80 words per minute for three minutes and transcribe the material into mailable/usable form.)

Management 339	Managing Business Operations and
	Organizations (3)

## Breadth and Perspective Requirements (15 units)

Students must take 15 units selected from the following:

Accounting 302	Cost Accounting (3)
Accounting 308	Concepts of Federal Income Tax (3)
Accounting 401	Advanced Accounting (3)
Economics 310	Intermediate Microeconomics (3)***
Economics 320	Intermediate Macroeconomics (3)***
Management 344	Intro to Systems Concepts (3)
Finance 320	Business Finance (3)
Management 340	Organizational Behavior (3)
Marketing 352	Principles of Retailing (3)***
Philosophy 312	Business/Professional Ethics (3)
Mathematics 135	Business Calculus (3)
Computer Sci 223F	Workshop in Fortran-77 (2)
Manage Sci 270	File Concepts and Cobal
	Programming (3)
Management 339	Managing Business
	Operations/Organization (3)***
Manage Sci 361	Probability and Statistical Methods in
	Business and Economics (4)

<sup>\*</sup>The concentrations for the business administration major in accounting, economics and marketing require a total of 18-20 units of in-depth course work in those areas.

<sup>\*\*</sup>Economics 210 Principles of Economics (5) may be substituted for Econ 201 and 202. Students who have already completed Econ 100 and 200 may substitute this combination for Econ 201 and 202.

<sup>\*\*\*</sup>These courses may not fulfill a portion of the breadth and perspective requirements if they are used to meet part of the core (specialization) requirements.

## SINGLE SUBJECT WAIVER: ENGLISH (ENGLISH, THEATER, SPEECH)

Core Requirements in Subjects Commonly Taught (30 units)

Composition

English 101 Beginning College Writing (3)

One of the following:

English 301 Advanced College Writing (3) Theatre 477B Senior Seminar in Critical

Techniques (3)

Speech Comm 300 Intro to Research in Speech

Communications (3)

Linguistics

English 303 Structure of Modern English (3)

One of the following:

Linguistics 106 Linguistics and Minority

Dialects (3)

English Language in English 305

America (3)

English 490 History of English Language (3)

Literature

All of the following:

English 300 Analysis of Literary Forms (3) English 311 Masters of British Literature

to 1760 (3)

Masters of British Literature English 312

from 1760 (3)

English 321 American Literature to

Whitman (3)

American Literature from Twain to the English 322

Moderns (3)

English 334 Shakespeare (3)

## Breadth and Perspective Requirements (15 units)

Students may select one of the following areas of emphasis:

Theatre: All of the following:

Theatre 200 Art of the Theatre (3) Theatre 263 Acting (3) Theatre 276A

Stagecraft (3) Theatre 370A Directing (3)

Theatre 402B Dramatic Activities for Children (3)

English Literature: Fifteen semester units of adviser-approved literature courses.

Public Speaking: Five courses from the following:

Public Speaking (3) Speech Comm 102 Forensics (3) Speech Comm 138

Human Communication (3) Speech Comm 200 Small Group Communication (3) Speech Comm 324 Processes of Social Influence (3) Speech Comm 332

Persuasive Speaking (3) Speech Comm 334

## SINGLE SUBJECT WAIVER: FRENCH

Upper-Division Requirements in Subjects Commonly Taught (30 units)

Language (Select 6 units from the following)

French Conversation (3) French 300 French 317 Advanced Composition and Grammar (3) ab going voo mexe nextraw Advanced Composition and Ilva mois French 318 Grammar (3)

Culture (Select 6 units from the following)

Origins of Modern France (3) French 315 French 325 Contemporary French Civilization (3) French 407 French Film (3)

Linguistics (Select 6 units from the following)

French 385 Translation (3) French 466 Introduction to French Linguistics (3) French 500 Stylistics (3)

Literature (Select 6 units from the following)

French 375 Introduction to Literature (3) French 415 French Classicism (3) French 425 French Romanticism (3) French 475ABCD Senior Seminar (3) French 485 French Literature (3)

Electives: Six upper-division units of electives selected from courses listed above in consultation with an adviser based on candidate's background, interest and teaching plans.

## SINGLE SUBJECT WAIVER: GERMAN

Upper-Division Requirement in Subjects Commonly Taught (30 units)

Language (Select 6 units from the following)

German 300 German Conversation (3) German 317 Advanced Conversation and Composition (3)

German 401 Advanced Conversation and

Vocabulary (3)

## Culture (Select 6 units from the following)

German 315	Introduction to German
	Civilization (3)
German 325	Current Trends in Culture of German- Speaking Peoples (3)
German 48205 and	German Film (3)

### Linguistics (Select 6 units from the following)

German 399	German Phonetics (3)
German 466	Introduction to German
	Linguistics (3)
German 500	Advanced Structure and Style (3)

## Literature (Select 6 units from the following)

Introduction to Literary Forms (3)
German Literature and Culture to the
Baroque (3)
18th Century German Literature and
Culture (3)
19th Century German Literature and
Culture (3)
20th Century German Literature and
Culture (3) saibute ramAwrotail-
Seminar in German
Literature (3)

Electives: Six upper-division units of electives selected from courses listed above in consultation with an advisor based on candidate's background, interest and teaching plans.

## SINGLE SUBJECT WAIVER: **GOVERNMENT**

## Core Requirements in Subjects Commonly Taught (30 Semester Units)

Political Sci. 100	American Government (3)
Political Sci. 300	Contemporary Issues in California
	Government and Politics (3)
Political Sci. 309	Intro to Metropolitan Politics (3)
Political Sci. 310	American Political Behavior (3)
Political Sci. 315	American Political Process (3)
Political Sci. 320	Politics, Policy &
	Administration (3)
Political Sci. 330	Comparative Political Analysis (3)
Political Sci. 340	Political Philosophy (3)
Political Sci. 350	World Politics (3)
Political Sci. 375	Public Law (3)

## Breadth and Perspective Requirements (15 Semester Units)

U.S. Government (6 units)

Two courses from the fe	
Political Sci. 311	Research Proseminar in American Political Behavior (3)
Political Sci. 347	Political Theory and Political Practice (3)
Political Sci. 407	Quantitative Methods in Political Science (3)
Political Sci. 410	Political Parties (3)
Political Sci. 413	Pressure Groups and Public Opinions (3)
Political Sci. 414	The Legislative Process (3)
Political Sci. 415	Power and Participation in America (3)
Political Sci. 416	The American Presidency (3)
Political Sci. 445	Political Learning & Socialization (3)
Chicano 460	The Chicano and Politics (3)
Afro 335	History of Racism (3)
One of the following:	l of the following:
Law (3 units) One of the following:	
Chicano 360	Chicanos and the Law (3)

Chicano 360	Chicanos and the Law (3)
Political Sci. 376	Research Proseminar in Public
	Law (3)
Political Sci. 470	Judicial Process (3)
Political Sci. 473	Introduction to Constitutional Law (3)
Political Sci. 474	Seminar in Constitutional Law: Civil
Political Sci. 475	Rights and Civil Liberties (3) Administrative Law (3)

## Comparative Systems/International Politics (3 units) One of the following:

Tolltical Sci. 333	Comparative Fontical Change (3)
Political Sci. 351	Research Proseminar in International
	Politics (3)
Political Sci. 425	Comparative Public ORE VIOLET
	Administration (3)
Political Sci. 430 (8)	Government Politics of a Selected
	Nation-State (3)
Political Sci. 431 (attention)	Government and Politics of a Selected Area (3)
Political Sci. 446	Corruption, Ethics and Public Policy (3)
Political Sci. 452 (a)	Foreign Policy of a Selected Country or Group of Countries (3)
Political Sci. 455	Comparative Analysis of Foreign

Political Sci 335 Comparative Political Change (3)

Public Administration (. One of the following:	3 units)	Africa and the Middle	East: take one pair (6 units)
Political Sci. 321	Research Proseminar in Politics, Policy	History 466A,B	History of Islamic Civilizations (6) Middle East in the 19th
	and Administration (3)	History 467	
Political Sci. 421	Public Finance Administration (3)	111.	Century (3)
Political Sci. 422	Public Personnel	and History 468	Middle East in the 20th
	Administration (3)	The state of the s	Century (3)
Political Sci. 423	Regional Planning and	History 458	Southern Africa in the 20th
	Development (3)		Century (3)
Political Sci. 424	Urban Planning and Development (3)	and Afro 346	The African Experience (3)
Political Sci. 425	Comparative Public	Daniel Donath Donath Do	aguinomente (15 unite)
Official Sci. 723	Administration (3)	Breadth and Depth Re	German 399 German Phones
Political Sci. 426	Collective Bargaining in the Public	Historical Methodology	
D. 1 1	Sector (3)		
Political Sci. 427	Current Issues in Urban &	History 300A	Historical Thinking (3)
D. L	Metropolitan Policy (3)	Amer Studies 350	Seminar in Theory and Method of
Political Sci. 429	Public Personnel Training (3)	Amer Studies 330	American Studies (3)
		History 490	Senior Research Seminar (3)
SINGLE SUBIE	ECT WAIVER: HISTORY	Amer Studies 401	Proseminar in American
The second secon		Affler Studies 401	
	n Subjects Commonly Taught (30-33		Studies (3)
units)		U.S. and North Amer	ican History: (at least 6 units)
All of the following:			The second secon
All of the following.		History/Amer Studies	
	One of the following:		
History 110A	Western Civilization to the 16th	386A	American Social
	Century (3)	History 1750-1860 (3)	
History 110B	Western Civilization Since the 16th	History/Amer Studies	in (b) enalus)
	Century (3)	386B	American Social History
History 383	History of California (3)		1860-1930 (3)
History 426	Rise of Modern Europe (3)	Amer Studies 301	The American Character (3)
History 429	Europe since 1914 (3)	Amer Studies 345	The American Dream (3)
Chernes (3)	Tomical Society	Amer Studies 395	American West in Symbol and Myth (3)
North America and U	.S.: take one from the following:	Amer Studies 416	Southern California Culture:
			A Study of American
History 180	Survey of American History (3)		Regionalism (3)
History 170A,B	United States History (6)	Amer Studies 450	Women in U.S. History (3)
Amer Studies 201	Intro to American Studies (3)	Chicano 453	Modern Mexico (3)
		History 380	Canada, 1534-1967
atin America, take or	no from the following:	History 350	History of Latin American Civilization
Latin America: take or	he from the following:	Thistory 330	(3) (If not used to satisfy core
	Li colloca (1)		requirements)
History 350	History of Latin American	Lineary 453	Modern Mexico (3)
	Civilization (3)	History 453	
History 453	Modern Mexico (3)	History 470	American Colonial Civilization (3)
		History 471	United States from Colony to
Asia: take one of the	following (3 to 6 units)	cal Behavior (3)	Nation (3)
with take offe of the f	conoming (5 to 6 dines)	History 472	Jeffersonian Themes in American
ics and Public	Political Ser. 446 Corruption 17th	2	Society, 1800-1861 (3)
History 360	Modern Asia (3)	History 473	Democracy on Trial 1845-1877 (3)
History 462A,B	History of China (6)	History 474	The United States 1876-1914 (3)
History 463A,B	History of Japan (6)	History 475	America Comes of Age,
	III		1014 1045 (2)
History 464A,B	History of Southeast Asia (6)		1914-1945 (3) United States Since 1945 (3)

History 479	The Urbanization of American	One of the following:	Rosely Related Subjects Requirement
History 485	Life (3) U.S. Foreign Relations (3)	Biological Sci 419	Marine Ecology (3) and
History 486	United States Cultural History (3)	Biological Sci 419L	Marine Ecology Lab (1)
History 487	History of American Parties &	D:-1:1 C-: 446	Physology (4)
Physical Ed 306 Physical Ed 308	Politics (3)	Biological Sci 446 Biological Sci 461 Biological Sci 475	Phycology (4) Invertebrate Zoology (4) Ichthyology (4)
Western Civilization a	nd Modern Europe: (at least 6 units)		Computer Sci 231 File Systems Co
History 341	Tudor-Stuart England (3)	Breadth and Perspective	ve Requirements (27-30 units)
History 342	Modern England and Great Britain (3)	Ol	wo of the following courses:
History 401	European Intellectual History from	Chemistry 120A, B	General Chemistry (10)
r Development (5)	1500 to the Present (3)	Physics 211A,B	Afranced Callo
History 415A	Classical Greece (3)	TO SEE THE PROPERTY OF THE PRO	Flowertory Physics (8)
History 415B	II II - 1 - 1 - C - 11 1 (2)	Physics 211AL, BL	Elementary Physics (8)
History 417A	Roman Republic (3)	One of the following:	hilosophy 369 Second Course i
History 417B	Roman Empire (3)	One of the following:	
History 425A	The Renaissance (3)	Ch 201 A B	INGLE SUSTINE CLASSICS OF STREET
History 425B	The Reformation (3)	Chemistry 301A,B	Organic Chemistry (6)
History 432	Modern Germany from 18th		
Physical Ed 336	Century (3)	Chemistry 302	Organic Chemistry Lab (2),
History 434A	Russia to 1890 (3)	01	Survey of Organic Chemistry (5)
History 434B	The Russian Revolutions and the	Chemistry 303	Survey of Organic Chemistry (5)
mobile numbt areas of	Soviet Regime (3)	0 6 - 1 - 6 - 11	THE RESERVE AND ASSESSED ASSESSED ASSESSED.
History 437	East Europe (3)	One of the following:	fusic 319 (1) the frame form and Applic
THISTORY TO			
Ensemble 17 violant		Math 1304	A Short Course in Calculus (4)
(1) alomasun	ECT WAIVER: LIFE	Math 130A Math 150A	A Short Course in Calculus (4)  Analytic Geometry and Calculus (4)
SINGLE SUBJE SCIENCE	Music 361M Men's Choir (1)	Math 150A Action Market	Analytic Geometry and Calculus (4)
SINGLE SUBJE SCIENCE	ECT WAIVER: LIFE		Analytic Geometry and Calculus (4)  Calculus (4)  CT WAIVER:
SINGLE SUBJE SCIENCE Core Requirements in All of the following:	Subjects Commonly Taught (31 units)	Math 150A SINGLE SUBJE MATHEMATIC	Analytic Geometry and Calculus (4)  Calculus (4)  CT WAIVER:  S AND MINISTER MAINE SIZE N
SINGLE SUBJE SCIENCE Core Requirements in All of the following:	Subjects Commonly Taught (31 units) Principles of Botany (2)	Math 150A SINGLE SUBJE	Analytic Geometry and Calculus (4)  Calculus (4)  CT WAIVER:  S and Model Transport A 198 plants  4 units)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L	Subjects Commonly Taught (31 units) Principles of Botany (2) Principles of Botany Lab (2)	SINGLE SUBJE MATHEMATIC Unit Requirement (34	Analytic Geometry and Calculus (4)  CT WAIVER:  S MAINTER MAINTER  Units)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2)	Math 150A SINGLE SUBJE MATHEMATIC	Analytic Geometry and Calculus (4)  CT WAIVER:  Superint Course in Calculus (4)  Analytic Geometry and Calculus (4)  Analytic Geometry and
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 161 Biological Sci 161L	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B	Analytic Geometry and Calculus (4)  CT WAIVER:  Sunits)  Analytic Geometry and Calculus (8)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 161L Biological Sci 302	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B	Analytic Geometry and Calculus (4)  CT WAIVER:  Sunits  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 161L Biological Sci 302 Biological Sci 302L	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335	Analytic Geometry and Calculus (4)  CT WAIVER:  Sunits)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 161L Biological Sci 302 Biological Sci 302L Biological Sci 312	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 335 Math 380	Analytic Geometry and Calculus (4)  CT WAIVER:  Sunits)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 161L Biological Sci 302 Biological Sci 302L Biological Sci 312 Biological Sci 312 Biological Sci 315	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335	Analytic Geometry and Calculus (4)  CT WAIVER:  Sunits)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 161L Biological Sci 302 Biological Sci 302L Biological Sci 312	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335 Math 380 Math 401	Analytic Geometry and Calculus (4)  CT WAIVER:  Sumits)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 161 Biological Sci 161 Biological Sci 302 Biological Sci 302L Biological Sci 302L Biological Sci 312 Biological Sci 315 Biological Sci 315 Biological Sci 316	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 335 Math 380	Analytic Geometry and Calculus (4)  CT WAIVER:  Sumits  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondary
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 161L Biological Sci 302 Biological Sci 302L Biological Sci 312 Biological Sci 312 Biological Sci 315	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)	SINGLE SUBJE MATHEMATIC Unit Requirement (34) Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402	Analytic Geometry and Calculus (4)  CT WAIVER:  Sumits  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondary
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 161 Biological Sci 161 Biological Sci 302 Biological Sci 302L Biological Sci 302L Biological Sci 312 Biological Sci 315 Biological Sci 315 Biological Sci 316	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)	SINGLE SUBJE MATHEMATIC Unit Requirement (34) Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402	Analytic Geometry and Calculus (4)  CT WAIVER:  Sumits)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondar Teacher (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 302 Biological Sci 302L Biological Sci 302L Biological Sci 315 Biological Sci 315 Biological Sci 316 One of the following: Biological Sci 315L	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)  Cell and Molecular Biology Lab (2)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402 One of the following:	Analytic Geometry and Calculus (4)  CT WAIVER:  Sumits  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondar Teacher (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 161 Biological Sci 161 Biological Sci 302 Biological Sci 302L Biological Sci 312 Biological Sci 315 Biological Sci 315 Biological Sci 316 One of the following:	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402 One of the following:	Analytic Geometry and Calculus (4)  CT WAIVER:  Sumits)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondar Teacher (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161 Biological Sci 302 Biological Sci 302L Biological Sci 302L Biological Sci 315 Biological Sci 315 Biological Sci 316 One of the following: Biological Sci 315L	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)  Cell and Molecular Biology (3)  Cell and Molecular Biology (3)  Principles of Ecology Lab (2)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402 One of the following:	Analytic Geometry and Calculus (4)  CCT WAIVER:  Sumits  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondar Teacher (3)  Mathematical Statistics (3)  Introduction to Stochastic Processes (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161L Biological Sci 302L Biological Sci 302L Biological Sci 312 Biological Sci 315 Biological Sci 316 One of the following: Biological Sci 315L Biological Sci 316L One of the following:	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)  Cell and Molecular Biology (3)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402 One of the following: Math 435 Math 438	Analytic Geometry and Calculus (4)  CT WAIVER:  Sumits  Analytic Geometry and Calculus (8)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondar Teacher (3)  Mathematical Statistics (3)  Introduction to Stochastic Processes (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161L Biological Sci 302L Biological Sci 302L Biological Sci 312 Biological Sci 315 Biological Sci 316 One of the following: Biological Sci 315L Biological Sci 316L One of the following:	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)  Cell and Molecular Biology (3)  Cell and Molecular Biology (3)  Cell and Molecular Biology (3)  Cell Principles of Ecology Lab (2)  Cell Physiology (4) Cell Physiology (4)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402 One of the following: Math 435 Math 438	Analytic Geometry and Calculus (4)  CT WAIVER:  Sumits  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondar Teacher (3)  Mathematical Statistics (3)  Introduction to Stochastic Processes (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161L Biological Sci 302 Biological Sci 302L Biological Sci 312 Biological Sci 315 Biological Sci 316 One of the following: Biological Sci 316L One of the following: Biological Sci 316L One of the following:	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)  Cell and Molecular Biology (3)  Cell and Molecular Biology (3)  Cell and Molecular Biology (3)  Cell Principles of Ecology Lab (2)  Cell Physiology (4) Cell Physiology (4) Comparative Animal	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402  One of the following: Math 435 Math 438  One of the following:	Analytic Geometry and Calculus (4)  CCT WAIVER:  Sunits)  Analytic Geometry and Calculus (8)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondar Teacher (3)  Mathematical Statistics (3)  Introduction to Stochastic Processes (3)
SINGLE SUBJE SCIENCE Core Requirements in All of the following: Biological Sci 141 Biological Sci 141L Biological Sci 161L Biological Sci 302L Biological Sci 302L Biological Sci 312 Biological Sci 315 Biological Sci 316 One of the following: Biological Sci 315L Biological Sci 316L One of the following:	Principles of Botany (2) Principles of Botany Lab (2) Principles of Zoology (2) Principles of Zoology Lab (2) General Microbiology (2) General Microbiology Lab (2) Genetics (3) Cell and Molecular Biology (3) Principles of Ecology (3)  Cell and Molecular Biology (3)  Cell and Molecular Biology (3)  Cell and Molecular Biology (3)  Cell Principles of Ecology Lab (2)  Cell Physiology (4) Cell Physiology (4)	SINGLE SUBJE MATHEMATIC Unit Requirement (34 Math 150A,B Math 250A,B Math 335 Math 380 Math 401 Math 402  One of the following: Math 435 Math 438  One of the following:	Analytic Geometry and Calculus (4)  CCT WAIVER:  Sunits)  Analytic Geometry and Calculus (8)  Analytic Geometry and Calculus (8)  Intermediate Calculus (8)  Mathematical Probability (3)  History of Mathematics (3)  Algebra and Probability for the Secondary Teacher (3)  Logic and Geometry for the Secondar Teacher (3)  Mathematical Statistics (3)  Introduction to Stochastic Processes (3)

## Closely Related Subjects Requirement (15)

Mathematics 302 Modern Algebra (3)

Mathematics 307 Applied Linear Algebra (3)

One of the following:

Computer Sci 131 Data Structures Concepts (3)
Computer Sci 231 File Systems Concepts (3)

Two of the following courses:

Math 350A Advanced Calculus (3)
Math 370 Mathematical Model Building (3)
Philosophy 368 First Course in Symbolic Logic (3)
Second Course in Symbolic Logic (3)

## SINGLE SUBJECT WAIVER: MUSIC

Core Requirements in Subjects Commonly Taught (30 units)

Diatonic Harmony (6)
Chromatic Harmony (3)
Survey of Musical Literature (3)
Orchestral Instruments (1)
Form and Analysis (3)
History and Literature of Music
(Greek through Renaissance) (3)
History and Literature of Music
(Baroque and Classics) (3)
History and Literature of Music
(Romantic to Present) (3)
Choral Conducting (2)

#### Breadth and Perspective Requirements (15 + units)

One of the following: (2 units)

Music 320A 20th Century Techniques (2)
Music 320B 20th Century Techniques (2)

One of the following: (4 units)

Music 323A Orchestration (2)
and
Music 324 Scoring for the Band (2)

Music 453A

Music 453B Choral Literature and Interpretation

and one of:

Music 457A Song Literature and Interpretation (2)

or

Music 457B Song Literature and Interpretation (2)

or

Music 468A Vocal Pedagogy (2)
Music 381 Survey of Recreational Instruments

(1) rican Parties

and

Music 435 Music in the Modern

Classroom (3)

One of the following: (2 or 3 units)

Music 333 Music and Child Development (3)
Music 354 Survey of Public School Choral Music

Materials (2)

Music 444 Survey of Marching Band Materials

(2)

## Take at least five of the following: (5 units)

Music 361A	Symphony Orchestra (1)
Music 361B	University Choir (1)
Music 361C	University Concert Band (1)
Music 361D	Opera Theatre (1)
Music 361E	University Singers (1)
Music 361F	University Wind Ensemble (1)
Music 361M	Men's Choir (1)
Music 361W	Women's Choir (1)
	TOTAL STREET

#### One of the following: (2 units)

Music 391B	Choral Conducting (2)
Music 392A	Instrumental Conducting (2)

#### Performance Requirement:

Perform at level sufficient to be admitted to Music 371 on principal instrument (O-4)

Piano Proficiency Requirement:

Completion of Music 282B or satisfactory passage of piano proficiency examination (0-4)

# SINGLE SUBJECT WAIVER: PHYSICAL EDUCATION

Core Requirements in, or directly related to, Subjects Commonly Taught (30 units)

All of the following: (15 units)

Physical Ed 300	Principles of Movement (3)
Physical Ed 349	Measurement and Evaluation (3)
Physical Ed 352	Physiology of Exercise (3)
Physical Ed 364	Motor Development (3)
Physical Ed 371	Principles of Human Motor
	Learning (3)

Analysis of Sports: (4	SINGLE SUBJECT WAS distingtion.	Physical Ed 151B Physical Ed 152A	Intermediate Aikido (1) Beginning Karate (1)
	30/13106		Intermediate Karate (1)
Physical Ed 303	Field Events (2)	Physical Ed 152B	Self-Defense (1)
Physical Ed 304	Swimming (2)	Physical Ed 154	Basic Hatha Yoga (2)
Physical Ed 305	Golf (2)	Physical Ed 246A	Intermediate Hatha Yoga (2)
Physical Ed 306	Gymnastics (2)	Physical Ed 246B	Intermediate Flatha loga (2)
Physical Ed 308	Soccer (2)		
Physical Ed 309	Badminton/Racquetball (2)	Sports and Games	
Physical Ed 312	Tennis (2) And company to an O	p. (1) gaimmis	Physical Ed 110B Intermediate Su
Physical Ed 316	Volleyball (2)	Physical Ed 117A	Beginning Bowling (1)
Physical Ed 319	Softball (2)	Physical Ed 117B	Intermediate Bowling (1)
	Chemistry 301A, B Organic Chemis	Physical Ed 117C	Advanced Bowling (1)
Techniques of Coachin	g: (2 units )	Physical Ed 118A	Beginning Archery (1)
cry Lab (z),	Chemistry 302 Organic Chemis	Physical Ed 118B	Intermediate Archery (1)
Physical Ed 328	Gymnastics (2)	Physical Ed 118C	Advanced Archery (1)
Physical Ed 330	Softball (2)	Physical Ed 119A	Beginning Golf (1)
Physical Ed 332	Tennis (2)	Physical Ed 119B	Intermediate Golf (1)
Physical Ed 334	Baseball (2) AS) samwolled and to IIA	Physical Ed 119C	Advanced Golf (1)
Physical Ed 335	Football (2)	Physical Ed 130A	Beginning Badminton (1)
Physical Ed 337	Basketball (2)	Physical Ed 130B	Intermediate Badminton (1)
Physical Ed 338	Volleyball (2)	Physical Ed 131A	Beginning Tennis (1)
	(1) Alechanics (3)	Physical Ed 131B	Advanced/Beginning Tennis (1)
Activities (9 units: at 1	east one course in each of the five com-	Physical Ed 131C	Intermediate Tennis (1)
	east six of the nine units at the intermedi-	Physical Ed 131D	Advanced Tennis (1) AOST 15 House 19
ate, advanced or interes		Physical Ed 132A	Beginning Racquetball (1) 13 Indiana
		Physical Ed 132B	Intermediate Racquetball (1)
Dance	Physics 225 AL, EL, CLO limida Mensal Ph	Physical Ed 132C	Advanced Racquetball (1)
y (3)	Geological Sci 101) maishingicalsGeolog	Physical Ed 133	Handball (1)
Dance 101	Introduction to Dance (3)	Physical Ed 142	Children's Games (1)
Dance 112	Beginning Classical Ballet (2)	Physical Ed 147	Olympic Power Lifting (1)
Dance 212	Intermediate Ballet (2)	Physical Ed 150A	Beginning Wrestling (1)
Dance 312	Advanced Classical Ballet (3)	Physical Ed 150B	Intermediate Wrestling (1).
Dance 122A	Beginning Modern Dance (2)	Physical Ed 155A	Beginning Fencing (1)
Dance 222	Intermediate Modern Dance (3)	Physical Ed 155B	Intermediate Fencing (1)
Dance 323A	Dance Composition (3)	Physical Ed 160	Baseball (1)
Dance 132	Beginning Jazz Dance (2)	Physical Ed 161A	Beginning Slow Pitch (1) by Isolayd's
Dance 232	Intermediate Jazz Dance (3)	Physical Ed 161B	Intermediate Slow Pitch (1)
Dance 332	Advanced Jazz Dance (3)	Physical Ed 162	Fast Pitch Softball (1)
Dance 142	Beginning Tap Dance (2)	Physical Ed 164A	Beginning Volleyball (1)
Dance 242	Intermediate Tap Dance (2)	Physical Ed 164B	Intermediate Volleyball (1)
		Physical Ed 164C	Advanced Volleyball (1)
Basic Movement	Geological Sci 340 Centeral Marcon	Physical Ed 165A	D (1)
l Chemistry (3)		Physical Ed 165B	Beginning Soccer (1) Intermediate Soccer (1)
Physical Ed 100	Physical Conditioning (1)	Physical Ed 166	· Team Handball (1)
Physical Ed 101	Athletic Conditioning (1)	Physical Ed 167A	Beginning Basketball (1)
Physical Ed 102A	Beginning Jogging (1)	Physical Ed 167B	Intermediate Basketball (1)
Physical Ed 102B	Intermediate/Advanced	Physical Ed 167C	Advanced Basketball (1)
- Moreur Da 102D	Jogging (1) anyworld and to own	Physical Ed 171	Intercollegiate Golf (2)
Physical Ed 104	Horseback Riding (1)	Physical Ed 172	Intercollegiate Cross Country (2)
Physical Ed 104 Physical Ed 105	Cycling (1)	Physical Ed 174	Intercollegiate Cross Country (2)
Physical Ed 108	Roller Skating (1)	Physical Ed 175	Intercollegiate Tennis (2)
Physical Ed 125	Rock Climbing (1)	Physical Ed 175 Physical Ed 176	Intercollegiate Wrestling (2)
Physical Ed 144	Exercise Weight Control (1)	Physical Ed 177	Intercollegiate Fencing (2)
Physical Ed 146	Body Building (1)	Physical Ed 177 Physical Ed 178	Intercollegiate Basketball (2)
Physical Ed 151A	Beginning Aikido (1)	Physical Ed 179	Intercollegiate Baseball (2)
	Degining Aikido (1)	I Hyorcai Lu III	interconcented Dascoali (2)

Physical Ed 180 Physical Ed 184	Intercollegiate Soccer (2) Intercollegiate Football (2)	SINGLE SUBJE SCIENCE	CT WAIVER: PHYSICAL
Physical Ed 185	Intercollegiate Volleyball (2)		1 7 1 (30 4)
Physical Ed 186	Intercollegiate Softball (2)		n Subjects Commonly Taught (39-42
	Physical Ed 240A Basic Madia Yoga	units)	
Aquatics			
		Chemistry 120 A,B	General Chemistry (10)
Physical Ed 110A	Beginning Swimming (1)		hysical Ed 309 Ballerer tan Bace
Physical Ed 110B	Intermediate Swimming (1)	One of the following:	hysical Ed 312 Tem (stinu 8-5)
Physical Ed 110C	Advanced Swimming (1)		hysical Ed 316 Velleylell (2)
Physical Ed 111	Life Saving (1)	CI . 2011 P	hysical lid 319 Softball (2)
Physical Ed 112	Water Polo (1)	Chemistry 301A,B	Organic Chemistry (6)
Physical Ed 114	Skin Diving (1)	and	0 : 01 -: 1-1 (3)
Physical Ed 116	Springboard Diving (1)	Chemistry 302	Organic Chemistry Lab (2),
Physical Ed 122A	Beginning Sailing (1)	or Cl 202	Samuel Chamister (5)
Physical Ed 122B	Intermediate Sailing (1)	Chemistry 303	Survey of Organic Chemistry (5)
Physical Ed 173	Intercollegiate Water Polo (2)		
Physical Ed 210	Water Safety Instructor (2)	All of the following: (2	24 units) almost the ball spleyd
Physical Ed 214	Basic Scuba (2)		hysical Ed 335 Footbell (2)
Physical Ed 343	Intermediate Scuba (2)	Physics 225A	Fundamental Physics: Mechanics (3)
Gymnastics		Physics 225B	Fundamental Physics: Electricity and Magnetism (3)
Physical Ed 120A	Beginning Gymnastics (1)	Physics 225C	Fundamental Physics: Modern Physics
Physical Ed 120B	Intermediate Gymnastics (1)	Tityotes 2250	(3)
Physical Ed 120C	Advanced Gymnastics (1)	Physics 225AL,BL,CL	Fundamental Physics Lab (1,1,1)
Physical Ed 170	Intercollegiate Gymnastics (2)	Geological Sci 101	Physical Geology (3)
Physical Ed 306	Gymnastics (2)	Geological Sci 101L Geological Sci 201	Physical Geology Lab (1) Earth History (4)
Depth and Perspecti	ve Requirements (15 units)	Physics 200	Introduction to Astronomy (4)
One of the following	g courses:	Breadth and Perspecti	ve Requirements (19 units)
		odern Damoe (3)	
Physical Ed 380	History of Physical Education (3)	Math 150A,B	Analytic Geometry and
Physical Ed 382	Philosophical Perspectives (3)	Math 130A, D	Calculus (8)
		r Dance (3)	Calculus (6)
One of the following	g courses:		
	Physical Ed 1647 Peginning Vollago	One of the following:	Sance 142 Beganning Top 1
Physical Ed 381	Human Movement in Cultural		
DI . 1.E.1.204	Perspective (3)	Geological Sci 340	General Meteorology (3)
Physical Ed 384	Sport Sociology (3)	Chemistry 361A Chemistry 371A	Intro to Physical Chemistry (3) Physical Chemistry (3)
Three of the following	ng courses:	Physics 310	Thermodynamics, Kinetic Theory, an Statistical Physics (3)
Physical Ed 340	Contemporary Movement		'hysical ed 1024' beginning joggn 'hysical ed 1024' besiden o'medistre (A
16 (2)	Environments (3)	Two of the following:	
Physical Ed 363	Developmental Adaptations of the Atypical (3)	ng (1)	Physical Ed 104 Horseback Kidin Physical Ed 105 Cycline (19) 21
Physical Ed 365	Prevention and Care of Athletic		d Elements of Biology and Lab (4)
esting (2)	Injuries (3)	101L) Riological Sci 141 (app	d Principles of P
Physical Ed 372	Movement and the Child (3)		d Principles of Botany and Lab (4)
Physical Ed 373	Movement Concepts (3)	141L) Biological Sci 161 (and	d Principles of Zools - 17.1 (4)
Physical Ed 383	Sport Psychology (3)	161L)	d Principles of Zoology and Lab (4)

## SINGLE SUBJECT WAIVER: SOCIAL SCIENCES

Core Requirements in Subjects Commonly Taught (33-36 units)

One of the following courses: (3-6 units)

History 180 Amer Studies 201 Survey of American History (3) Introduction to American Studies (3)

History 170A.B

United States History (6)

All of the following: (24 units)

Three units of History of California or California Government

Six units of American Government (6)

Three units in Economics (3)

History 110A

Western Civilization to 16th

Century (3)

History 110B

Western Civilization Since the 16th

Century (3)

Anthropology 100

Non-Western Cultures and the

Western Tradition (3)

Geography 100

World Geography (3)

One of the following: (3 units)

Hum Ser/Afro 311 Chicano 445

Intracultural Social Patterns (3) History of the Chicano (3)

One of the following: (3 units)

Amer Studies 301

The American Character (3)

Amer Studies 450 Women in American Society (3)

Breadth and Perspective Requirements (18 units)

One of the following courses:

Geography 330 Geography 332 California Landscape (3) United States and Canada (3)

All of the following: And Comment of the following:

Three units of Sociology No standard (Setulated Secular Securar Secular Secular Secular Secular Secular Secular Secular Secular Secula

Three units of Political Science to both amount medical science

Three units of Psychology

Six units from any combination of the following:

Afro-Ethnic Studies

American Studies

Anthropology

Chicano Studies

**Economics** 

Geography

History

Political Science

Psychology

Sociology

## SINGLE SUBJECT WAIVER: SPANISH

Upper-Division Requirement in Subjects Commonly Taught (30 units)

Language (Select 6 units from the following)

Spanish 300

Spanish Conversation (3)

Spanish 317

Advanced Conversation and Composition (3) a bestrodius oals ed

Spanish for Advanced Students (3) thorization. CSUF offers 3 supplementary a

Culture (Select 6 units from the following:) 300 100 days algain

Spanish 315

Intro to Spanish Civilization (3) Introduction to Spanish-American

Spanish 316

Civilization (3)

Spanish 415

Contemporary Spanish Culture (3)

Spanish 416

Contemporary Spanish-American Culture (3)

Linguistics (Select 6 units from the following:)

Spanish 466

Introduction to Spanish Linguistics (3)

Spanish 467

Dialectology (3)

Spanish 468

Spanish-English Contrastive

Analysis (3)

Literature (Select 6 units from the following:)

Spanish 375 Spanish 430 Introduction to Literary Forms (3) Spanish Literature to

Neoclassicism (3)

Spanish 441 Spanish 461 Spanish American Literature (3) Spanish Literature since Neo-

classicism (3)

Spanish 475

Topics in Spanish Peninsula

Literature (3)

Spanish 485

Topics in Spanish American

Literature (3)

Electives: Six upper-division units of electives selected from courses listed above in consultation with an adviser based on candidate's background, interest and teaching plans.

# D. Supplementary Authorizations for the Basic Teaching Credentials

It is possible to expand the subject matter authorization a teaching credential initially carries to other subject fields. The State recognizes several subject areas that can be added to a Multiple Subject Credential; thereby qualifying person to teach in departmentalized junior high classrooms (grades 6-9). CSUF offers 16 Supplementary Authorizations for the Multiple Subject Credential in:

Art German Life Science French Health Science Physical Education Social Science Music Spanish Anomaro at Mathematics Applied Applied Applied Physical Science Business General Science English as a Second Language Computer Concepts & Applications English

Supplementary Authorizations for the Single Subject Credential permit a person who holds a credential in one broad subject field to be also authorized to teach in another more specific subject area, one that might be quite different from the field of broader authorization. CSUF offers 37 supplementary authorizations for the single Subject Credential in:

Accounting/Computer Literacy Animal Science (Zoology) Anthropology

Biology Ceramics Chemistry Comparative Political Systems/International Composition/Critical Thinking

Computer Concepts and Applications

Crafts (Arts) Dance Contract Contract

Drama

Drug Use and Abuse

Earth Science (Geology)

Economics

Economic and Consumer Education

Electronics Family Health Geography delange

Graphic Arts a supersul delacate

Instrumental Music

Jewelry Jennes Hanney Iournalism

Literature

Marketing and Distribution

Painting and Drawing

Personal Health

Photography

Physics

Plant Science Na // AW TOHERUS AJOMES

Psychology

Sociology Speech

U.S. Government/Civics

U.S. History/California History

Vocal Music

World History

Also, to permit the holder of a single subjects credential to teach certain subjects in grades 9 and below, CSUF offers eight supplementary authorizations in:

Requirements in Subjects Commonly

General Science Introductory English William State of the Automatical State of the Sta Introductory French Introductory German Introductory Health Sciences And Annual To asimu xil

Introductory Mathematics Introductory Social Science

Introductory Spanish

Contact the Credential Preparation Center, Education Classroom 207, for details concerning course requirements for specific supplementary authorizations.

## E. Specialist and Services Credentials

CSUF offers several State approved programs leading to more specialized credentials. Most of these programs build on the teaching experience that holders of a basic credential have achieved. Often these specialist or services credentials are oriented toward postbaccalaureate course work and coincide with Master's degree programs. Further information about specific requirements for each can be obtained under the appropriate departmental listing in this catalogue.

#### CSUF offers the following Specialist Credential programs:

- 1. Learning Handicapped, to teach the learning handicapped including the behaviorally disordered and educationally retarded. See Department of Special Education, School of Human Development and Community Service.
- 2. Reading Specialist, to teach reading to students of diversified grade and ability levels and to assist all teachers in being better reading teachers. See Department of Reading, School of Human Development and Community Service.
- 3. Resource Specialist (Certificate of Competency), to serve as a resource specialist in programs serving special education students, their parents and their regular teachers. See Department of Special Education, School of Human Development and Community Service.

 Severely Handicapped, to teach the severely-multiply-handicapped, severely emotionally disturbed and autistic. See Department of Special Education, School of Human Development and Community Service.

In addition CSUF is currently seeking approval for a newly authorized credential, Language Development Specialist, to teach limited or non-English proficient students. See Department of Foreign Language and Literature, School of Humanities and Social Science.

### CSUF offers the following Services Credential programs:

- 1. Administrative Internship, a field based internship program leading to a preliminary level administrative services credential. See Department of Educational Administration, School of Human Development and Community Service.
- Administrative Services (Preliminary Level), the first step of the new two-step administrative services credential structure, authorizing service as a school site administrator, principal or other administrative officer of a school district. See Department of Educational Administration, School of Human Development and Community Service.

- Administrative Services (Professional Level), the second step of the new two-step administrative services credential structure.
   See Department of Educational Administration, School of Human Development and Community Service.
- Clinical Rehabilitation (Language, Speech and Hearing), to provide services to students with exceptional needs and/or neurophysical disorders in language, speech, and hearing. See Department of Speech Communication, School of Humanities and Social Sciences.
- Clinical Rehabilitation (Special Class Authorization), to provide services to students with severe disorders of language. See Department of Speech Communication, School of Humanities and Social Sciences.
- 6. Pupil Personnel Services, to provide counseling and testing services to students. See Department of Counseling, School of Human Development and Community Services.

# University Extended Education

Extended Education/Personnel Services Building (714) 773-2611

## Extension

Extension brings the resources of the university to the community through credit and non-credit programs designed primarily for individuals not currently working toward completion of a university degree. Seminars, workshops, and certificate programs serve needs associated with professional continuing education, certification, career advancement, and career change. Other programs are designed for personal development and intellectual growth. Extension programs can be designed to meet the specific needs of particular groups or agencies, can be initiated any time during the year and offered at a variety of locations including the workplace. Telecommunications technologies can deliver extension programs to off-campus sites.

The amount of extension credit which will be accepted toward a baccalaureate degree is 24 semester units. Nine semester units of extension credit may be applied toward a master's degree with appropriate approval. Extension credit may not be used to fulfill the minimum residence requirement for graduation.

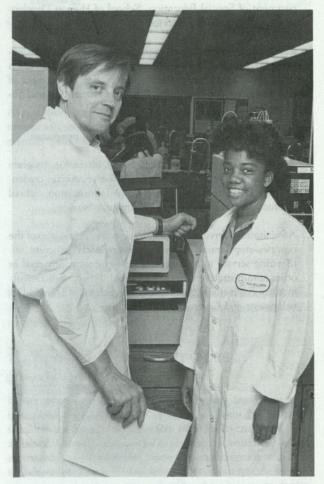
# Adjunct Enrollment

Many of the university credit courses listed in the fall and spring class schedules are open on a space-available basis to extension students through Adjunct Enrollment. Matriculated students may not enroll through this program.

## Summer Session

Summer session course offerings are selected primarily to serve the needs of students working toward the completion of degree programs; prospective students who wish to begin coursework while admission to the university is in progress; and members of the community who wish professional advancement, professional continuing education, or personal enrichment. Summer session is open admission although students are expected to satisfy all prerequisites for the courses in which they enroll. Courses offered as a part of summer session apply toward residence and graduation requirements. Summer enrollment does not constitute admission

A summer session class schedule listing courses to be offered in the coming summer with descriptions of special course offerings, a registration form and instructions, is available in March. Registration may be completed in person, by fax, telephone, or mail.



## Televised Instruction

Modern telecommunications technologies make it possible to receive educational programs from distant locations and to deliver courses to off-campus sites. Resources available to faculty and students include satellite teleconferences, Interactive Televised Instruction, optical fiber and cable delivery systems. Residence credit, extension credit and non-credit courses are delivered to the Mission Viejo Campus, public schools, business, industry, and the home via Interactive Televised Instruction. Informational programs about CSUF, its faculty, students, staff, and the surrounding community are delivered via The Titan Cable Network.

For more information on Interactive Televised Instruction, contact University Extended Education Distance Learning office.

## Intersession

Intersession is scheduled between the fall and spring semesters during the month of January. One to three unit courses are offered which primarily serve the needs of degree seeking students. These courses allow students to enrich their educational experience by taking courses in topics not offered during other academic terms and to accelerate progress toward a degree. Intersession courses are open enrollment and apply toward residence and graduate requirements.

# Certificate Programs

Certificate programs are designed for those who want formal recognition for completing a structured and rigorous course of study in a specific field but who may not be interested in pursuing a university degree program. Certificates are awarded when participants complete the course requirements. University Extended Education offers credit certificate programs in the following areas:

Gerontology

Production and Inventory Control Technical Writing School Business Management Manufacturing Operations Management Non-credit certificate programs are available in several areas including:

ADA Programming

Commercial Bank Credit Analysis and Loan Extension

C Programming Language

C Programming Language
Crime and Intelligence Analysis
Effective Employee Management

Entrepreneurship

Excellence in Manufacturing Management

Industrial Controls Technology

Industrial Distribution

International Marketing

Magic: The Performance Art

Managing Multicultural Work Environments

Mortgage Banking

Microcomputer System Design

Object Oriented Programming

Operations and Administration of Microcomputers in Libraries

Perioperative Nursing Care

Perioperative and Post-anesthesia Nursing Care

Real Estate Appraisal

Systems Engineering

Transportation Demand Management

New credit and non-credit programs are always being developed. For current titles, contact University Extended Education.

## Community Service Programs

University Extended Education is committed to public service and community development programs serving the multicultural population of Orange County. For example, Continuing Learning Experience (CLE) is a program for retired and semi-retired persons. The CLE office is located in the Charles L. and Rachael E. Ruby Gerontology Center. Other examples of community service programs include La Universidad de la Familia and the Center for Socioeconomic Development.

# International Programs

Developing intercultural communication skills and international understanding among its students is a vital mission of The California State University (CSU). Since its inception in 1963, the CSU International Programs has contributed to this effort by providing qualified students an affordable opportunity to continue their studies abroad for a full academic year. Close to 11,000 CSU students have taken advantage of this unique study option.

International Programs participants earn resident academic credit at their CSU campuses while they pursue full-time study at a host university or special study center abroad. The International Programs serves the needs of students in over 100 designated academic majors. Affiliated with 36 recognized universities and institutions of higher education in 16 countries, the International Programs also offers a wide selection of study locales and learning environments.

Australia Brazil Canada

Denmark

Israel

Italy

Spain

The University of Queensland (Brisbane)

Universidade de São Paulo

The universities of the Province of Quebec (13 institutions, including Université de Montréal, Concordia University, Université Laval, McGill University, Université du Quebec system, Bishop's University, i.a.) Denmark's International Study Program (the

international education affiliate of the University of Copenhagen)

Institut des Etudes Françaises pour Étudiants Ètrangers, Université de Droit, d'Economie et des Sciences d'Aix-Marseille (Aix-en-Pro-

Germany Ruprecht-Karls-Universität (Heidelberg)

and Eberhard-Karls-Universität (Tübingen) The Hebrew University of Jerusalem

CSU Study Center (Florence), Universitá degli Studi di Firenze, and La Academia di

Belle Arti Firenze

Japan Waseda University (Tokyo)

Mexico Universidad Iberoamericana (Mexico City) New Zealand Lincoln University (Christchurch) and Massey University (Palmerston North)

Universidad Complutense de Madrid and

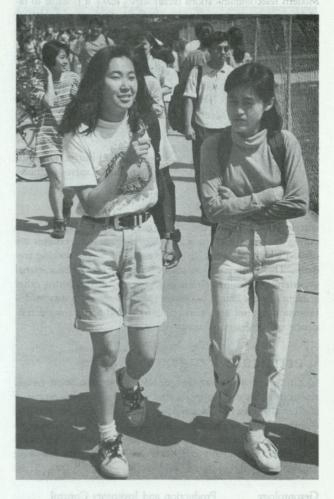
Universidad de Granada

Sweden Uppsala Universitet

National Chengchi University (Taipei) Taiwan United Kingdom Bradford University, Bristol University,

Kingston University, Sheffield University, and University of Wales, Swansea

Zimbabwe University of Zimbabwe (Harare)



The International Programs pays all tuition and administrative costs for participating California resident students to the same extent that such funds would be expended to support similar costs in California. Participants are responsible for all personal costs, such as transportation, room and board, living expenses, and home campus fees. Participants remain eligible to receive any form of financial aid (except work-study) for which they can individually qualify.

To qualify for admission to the International Programs, students must have upper division or graduate standing at a CSU campus by the time of departure. California Community Colleges transfer students are eligible to apply directly from their community college if they can meet this requirement. Students must also possess a current cumulative grade point average of 2.75 or 3.0, depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Additional information and application materials may be obtained on campus from the Office of International Education and Exchange or by writing to The California State University International Programs, 400 Golden Shore, Suite 300, Long Beach, California 90802-4275.

# **International Exchange Programs**

California State University, Fullerton has direct institutional exchange programs with universities throughout the world. Such agreements allow for the exchange of faculty and students for purposes of teaching, study, research and for the promotion of cultural understanding and interaction.

Current programs link California State University, Fullerton with Fudan University, Shanghai; Zhejiang University, Hangzhou; People's Republic of China; eight campuses of the University of Paris, France; the Autonomous University of Guadalajara; the Mexicali and Ensenada campuses of the Autonomous University of Baja California, Mexico; the Moscow Institute of Steel and Alloys, Republic of Russia; and Nanzan University, Nagoya, Japan.

CSUF students pay home campus fees plus their living, transportation and related expenses. They must maintain home campus fulltime enrollment status in the exchange program. They thereby may qualify for any financial aid for which they normally would be eligible. Credit received while studying abroad is subject to CSUF departmental approval for determination of equivalency.

Information and application forms are available in the Office of Academic Programs, McCarthy Hall-129, and in the Office of International Education and Exchange, McCarthy Hall-79.

## American Language Program

California State University, Fullerton welcomes international students who wish to perfect their English language skills. The American Language Program (ALP) course of study provides intensive practice in listening, speaking, reading, writing and study skills while promoting an understanding of U.S. culture and society. Classes are small, so students will receive individual attention which will help them achieve rapid fluency in English.

All entering ALP students must take a placement test. On the basis of the test results, students are placed in one of six academic levels. At the beginning and intermediate levels, students attend multi-skills classes for 24 hours per week. Additional hours are required for homework and practice in the Language Laboratory. Advanced level students are in a semi-intensive program. In addition to multi-skills classes, they may take specialized classes such as English for Business, English for Science and Technology, or Test of English as a Foreign Language (TOEFL) preparation.

No university credit is given for ALP classes; however, qualified advanced students may take one or two classes for university credit through Extended Education with the consent of the program director. Students should expect regular homework assignments in all their classes. For further information, contact the Director of the American Language Program (714) 773-2909.

## AIESEC

AIESEC, the French acronym for International Association of Students in Business and Economics, is an international student organization which works in cooperation with local corporations to bring business trainees from all parts of the world to Orange County and, therefore, earns credits for placement of CSUF students in the 61 other participating countries. Students can be engaged for periods from six weeks to eighteen months and gain invaluable business experiences in another culture. For further information call (714) 773-2266.

## **International Study Courses**

Cal State Fullerton students under The California State University International Study Programs register concurrently at Cal State Fullerton and at the host institution abroad, with credits assigned to the student which are equivalent to courses offered at Cal State Fullerton. Undergraduate students who discover appropriate study opportunities at the host Institution but no equivalent course at Cal State Fullerton may use Independent Study 499 and International Study 292 or 492. Graduate students may use Independent Graduate Research 599 and International Study 592.

# 292 Projects in Study Abroad (Subject): (1-6 lower-division

Open to students enrolled in California State University International Programs. Study undertaken in a university abroad under the auspices of The California State University.

# 492 Projects in Study Abroad (Subject): (1-3 upper-division

Open to students enrolled in California State University International Programs. Study undertaken in a university abroad under the auspices of The California State University.

592 Projects in Study Abroad (Subject): (1-3 graduate units) Open to students enrolled in California State University International Programs. Study undertaken in a university abroad under the auspices of The California State University.

# Special Programs

From the total curriculum of the university, students may wish to plan a specially designed program of study that does not duplicate significantly any existing major or concentration. The undergraduate special major and the graduate interdisciplinary studies program provide opportunities for selected students to pursue individualized programs of study leading to a degree when legitimate academic and professional goals can be satisfied by a judicious selection of courses from two or more fields, and when these aims cannot be satisfied by the authorized standard degree majors or double majors that are available on the campus (e.g., liberal studies, social sciences). The special major and interdisciplinary studies program are designed for exceptional cases of individual students only and provide an opportunity to develop a concentration or specialization outside the framework of existing majors. These programs are not intended as a means of bypassing normal graduation requirements or as a means by which students may graduate who fail to complete the degree major in which they are enrolled.

# B.A. Special Major

Students desiring to work for a bachelor's degree with a special major should consult with the Office of Academic Advisement.

- 1. Entrance to the special major program is normally at the beginning of the junior year (60 units remaining for graduation).
- 2. The minimum requirement for the major is 48 units. A minimum of 36 upper-division units must be included in the major.
- 3. Although students may include on their study plans, course work in progress and a maximum of 12 units of course work completed prior to the time of filing, approval of these courses is not automatic.
- 4. No more than six units of 499 (Independent Study) and/or internship course work may be included in the major.
- 5. Neither lower- nor upper-division courses applied to general education breadth requirements will be applicable toward the major.
- 6. At least three units of appropriate course work in methodology shall be included in the student's study plan. Where appropriate this requirement may be waived by the University Curriculum Committee.
- 7. All courses in the major must be taken for a letter grade (Grade Option 1). A GPA of 3.0 in the major is required for graduation.

- 8. Prior to taking any substitute course work a petition for change of the study plan must be approved by the student's adviser and the University Curriculum Committee.
- 9. A senior thesis shall be written by the student in this program during the semester preceding graduation. This thesis should show scholarly evidence of the merit in the student's choice of an interdisciplinary program. This paper shall be written under the direction of the student's special major adviser and approved by the faculty designated by the departments represented on the student's study plan.

# M.A. Interdisciplinary Studies

A graduate student desiring to work for a master's degree in interdisciplinary studies should consult with the Office of Graduate Studies and fill out an initial request form available at that office.

- 1. Entrance to the program requires a grade-point average (GPA) of 3.0 in the undergraduate major and a GPA of 3.0 in the last 60 units of course work.
- 2. The minimum requirement of units for an M.A. in Interdisciplinary Studies is 30 units of which at least half must be graduate courses (500-level).
- 3. Although students may include on their proposed study plan course work in progress or completed prior to the time of filing, approval of these courses is not automatic. No more than nine units of course work taken prior to classified standing can be approved on the program.
- 4. The program may contain no more than six units of Indepenandent Study, Project or Thesis. men among an above 1080
- 5. All courses on the study plan must be taken for a letter grade (Grade Option 1) and no grade below a C is acceptable on the study plan. Please see the section in this catalog titled "Study Plan" for additional requirements.
- 6. Prior to taking any substitute course work, a petition for change of the study plan must be approved by the student's graduate adviser and graduate committee.
- 7. A Thesis or Project shall be required for the completion of the program. The completed thesis will be filed with the Library; whereas the project shall be filed with the Office of Graduate American Language Program (ALP) course of studiesibut8des

# Curricula Information



research or creative nature, and normally culminates in a paper,

## Course Descriptions

Course descriptions briefly describe the content or subject matter to be covered and provide additional information on units of credit, the level of instruction (see course numbering code), prerequisites and the type of course (lecture, laboratory, activity, seminar and individually supervised work).

# Course Numbering Code

The first number in each course designation is intended to indicate the level of complexity of the course. In addition, the first number also is a rough index of the student's year of study at the university. The following are guidelines for course numbering.

- 001-099 Courses which carry no credit toward a degree or credential. Generally, developmental, remedial, or precollege in content.
- 100-199 Lower division courses designed primarily for freshman level, but also open to other students. These courses are generally introductory in nature and are usually designed without prerequisites.
- 200-299 Lower division courses designed primarily for sophomore level, but also open to other students. Although there is no clear distinction between lower division courses listed at the 100 or 200 level, there is an inherent assumption that students in these courses have acquired skills appropriate to the second year of university level work.
- 300-399 Upper division courses designed primarily for juniors, but also open to other students. Third year or junior level course work is likely to emphasize specialization in the disciplines. It is expected that specific prerequisites are used to indicate the necessary competencies required for study at this level. These courses do not give graduate credit unless included on an approved graduate study plan for a specific graduate student. Such a study plan shall include an explicit rationale for the inclusion of said 300-level course(s).
- 400-499 Upper division courses designed primarily for seniors, but also open to other students. Prerequisite work is required. Course work is intended to provide depth of understanding or additional focus appropriate to the disciplines. Courses at the 400 level are sufficiently sophisticated for inclusion on graduate study plans.

- 500-599 Courses designed primarily for graduate students who are enrolled in advanced degree programs. The courses of study are advanced and specialized in nature and require substantial undergraduate preparation. Undergraduate students may enroll if they have reached senior status, have the prerequisites required for entry into the course, and have gained consent of the instructor.
- 700-701 Course numbers for graduate and postbaccalaureate students (including those seeking a credential) to maintain continuous enrollment during a particular semester, and who are not enrolled in regular courses. These numbers do not represent courses and do not therefore grant credit.
- 900-999 Courses are specifically designed for professional groups seeking vocational improvement or career advancement. Credit for these courses does not apply to undergraduate or graduate degrees or credentials at the uni-

An honors course shall use the letter H. A laboratory course which accompanies another course should use the letter L. A variable topics course shall use the letter T.

A controlled entry course is one which has enrollment requirements in addition to any prerequisite courses. Additional requirements include prior approval of the instructor, special academic advisement, a qualifying exam, a placement test, an audition, a teaching credential, or similar special qualifications.

# Special Course Numbers

For uniformity, certain types of courses have been listed by all departments and schools with the same numbers: 499 and 599 are used respectively for undergraduate and graduate "independent study"; 196 or 496 for "student-to-student tutorials"; 597 for a graduate "project"; and 598 for a graduate "thesis."

## **Explanation of Course Notations**

Certain notations are uniformly used in the course descriptions in this catalog.

- 1. The figure in parentheses following the course title indicates the number of semester units for the course. Courses offered for varying units are indicated as (1-3) or (3-6).
- 2. A course listing such as Afro-Ethnic Studies 108 (3) (Same as Linguistics 108) indicates that a student taking the course may choose to count it in either of those two disciplines.
- 3. A notation such as (Formerly 433) following the course title and the number of units indicates the same course previously was numbered 433.

## Student-to-Student Tutorials

The "student-to-student tutorial" provides a formal way to encourage students to learn through teaching. It also provides tutoring to all students who need and want tutorial assistance.

In those departments which choose to offer such courses, the courses are numbered 196 or 496 and carry one to three units of credit. The prerequisites include a grade-point average of at least 3.0 and/or consent of the instructor. The tutor and his/her tutee or tutees will work in mutually advantageous ways by allowing all involved to delve more carefully and thoroughly into the materials presented in this specific course. One to three students may be tutored by the tutor unless the instructor decides that special circumstances warrant increasing the usual maximum of three tutees. Three hours of work per week are expected for each semester unit of credit, and this work may include, apart from contact hours with tutees, such other activities as: tutorial preparations; consulting with instructors; reporting, analysis and evaluation of the tutorial experiences; and participation in an all-university orientation and evaluation program for tutors. A maximum of three units may be taken each semester. No more than three units of any combination of tutorial courses (196 or 496) may count toward an undergraduate degree program. The course must be taken as an elective and not counted toward general education, major or minor requirements. The course can be taken on a credit/no credit basis by the tutor. Requests for tutors must be initiated by tutees and can be initiated up until the official university census date. Tutors electing to respond to such requests will receive credits at the end of the semester and can register in the course until the official university census date. Both tutors and tutees must submit written reports, analyses and evaluations of their shared tutorial experience to the instructor, and both must participate in an all-university orientation program as well as in any conference or critique that the instructor of the course may require.

Further information can be obtained from the department in which the student is interested in a "student-to-student tutorial."

## Independent Study

Under the independent study program, the student may pursue topics or problems of special interest beyond the scope of a regular course under the supervision of a faculty adviser. The work is of a research or creative nature, and normally culminates in a paper, project, comprehensive examination, or performance. Before registering, the student must get his topic approved by the instructor who will be supervising independent study and by the department chair.

A student may take no more than six units of independent study at the undergraduate level (299 and 499 numbered courses) in a given semester. No more than nine units of independent study may be applied toward completion of the baccalaureate degree. A graduate student may apply no more than six units of independent study (499 or 599 numbered courses) toward completion of master's degree, unless written approval is obtained from the appropriate school dean.

# Cross-Disciplinary University Programs

A joint degree program is an endeavor involving two or more existing academic departments which need not be within the same school. Such programs are administered by program councils composed of representatives elected by participating departments. The joint degree programs are housed in administration units as follows:

## School of Human Development and Community Service

Child Development, B.S. Human Services, B.S.

#### School of Humanities and Social Sciences

Environmental Studies, M.S. Latin American Studies, B.A. Liberal Studies, B.A. Russian and East European Area Studies, B.A. Social Sciences, M.A.

The degree descriptions are located within the appropriate school section of this catalog.

# Bilingual/Cross-Cultural Studies

Students may pursue a course of study with a bilingual/ cross-cultural emphasis.

Complete course listings and details are available from the Department of Foreign Languages and Literatures, the Department of Chicano Studies, Division of Teacher Education and Educational Opportunity Program advisers.

## Library Courses

201 Introduction to Library Resources (1)

A practical introduction to library materials and methods enabling undergraduate students to locate information for courserelated, as well as independent study and research.

#### 200 Elements of Bibliographic Investigation (3)

A survey of important information sources in various subject fields and the application of research methods which will enable students to become effective library users. Particular attention is given to the assembling of material for term papers and reports, including the preparation of bibliographies.

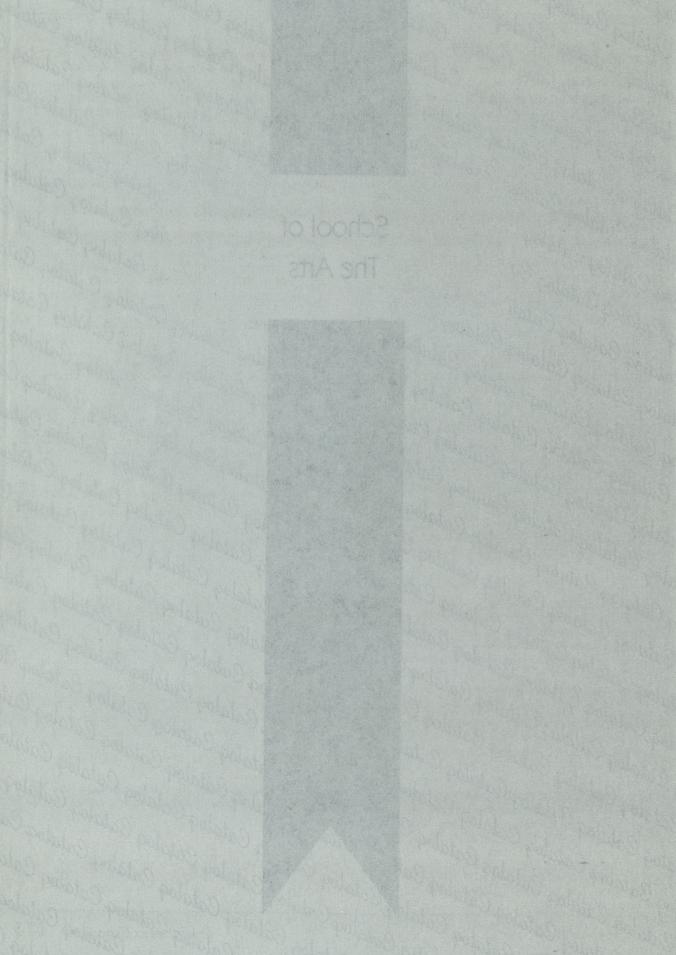
302T Library Research Methods for Specific Majors (1)

Library research methodology and introduction to library resources in special subject areas such as business, education and science.

# **University Studies Course**

100 Introduction to University Studies (1)

Designed for first-time freshmen. Introduction to higher education structure and expectations. Study skills development. Advisement towards academic and personal development and success. Organization and purpose of curricular and administrative requirements. Offered credit/no credit only.



# School of the Arts



Dean: Jerry Samuelson Associate Dean: Frank Cummings III Assistant Dean, Student Affairs: Nancee Benson

The learning opportunities within the School of the Arts are based on a commitment to artistic and academic excellence. We provide an environment which encourages individual achievement for performers, artists and scholars.

Within the broader university liberal arts environment, the School of the Arts offers intensive programs in Art, Music, Theatre and Dance. We are also committed to the enhancement of artistic awareness of all students.

We extend a warm welcome to you and we promise that with your perseverance, we will do everything possible to further your goals and objectives in whatever field of the arts you choose.

Academic advisement is available through the departments. Faculty advisors are available to assist students with career decisions and degree requirements.

Several scholarships are available to students in the School of the Arts. Inquiries should be made to the respective department

## Programs Offered

## Art, Bachelor of Arts

Art History General Studio Art Teaching

## Art, Bachelor of Fine Arts

Drawing and Painting
Printmaking
Sculpture
Crafts
Ceramics
Graphic Design
Illustration
Environmental Design
Creative Photography

#### Minor in Art

#### Art, Master of Arts

Sculpture
Crafts (including Ceramics, Glass, Fibers, Wood,
Jewelry/Metalsmithing).
Design (including Environmental Design, Graphic Design,
Illustration, Exhibition Design, Creative Photography).
Art History

Drawing and Painting (including Printmaking)

#### Art, Master of Fine Arts

Drawing, Painting and Printmaking
Sculpture
Ceramics (including Glass)
Crafts (including Fibers, Jewelry/Metalsmithing, and
Woodworking/Furniture)
Design (including Graphic Design, Illustration,
Environmental Design, and Exhibition Design)
Creative Photography

## Certificate in Museum Studies

#### Dance, Bachelor of Arts

## Music, Bachelor of Arts

Liberal Arts Music Education Music History and Theory

#### Music, Bachelor of Music

Commercial Music Composition Instrumental Keyboard Voice Accompanying

#### Minor in Music

## Music, Master of Arts

Music History and Literature Music Education

#### Music, Master of Music

Performance Theory-Composition

#### Theatre Arts, Bachelor of Arts

History and Theory
Production/Performance
Acting
Directing
Musical Theatre
Oral Interpretation
Playwriting
Technical Production/Design
Television
Teaching

#### Theatre Arts, Master of Arts

#### Theatre Arts, Master of Fine Arts

Acting
Directing
Technical Theatre and Design



# Department of Art

Department Chair: Darryl J. Curran Department Office: Visual Arts 102
Programs Offered

# Bachelor of Arts in Art And To role Dechelor of Arts in Art

Art History wind and read to meet the individual and art. General Studio Art Com - Water Afficiants to exercini Teaching

## Bachelor of Fine Arts in Art

Drawing and Painting Printmaking Sculpture Crafts Ceramics

Graphic Design Environmental Design Creative Photography

## historical and contemporary art forms as they rain Art ni roniM

## Master of Arts in Art

Drawing and Painting (including Printmaking) (4) to develop this knowledge and skills neo Sculpture Crafts (including Ceramics, Glass, Fibers, Wood, Jewelry/Metalsmithing) has a substantial and gold/ab (2) Design (including Environmental Design, Graphic Design, Illustration, Exhibition Design, Creative Photography) Art History

# Master of Fine Arts in Art

Drawing, Painting, and Printmaking Sculpture Ceramics (including Glass) Crafts (including Fibers, Jewelry/Metalsmithing, and Woodworking/Furniture)

Design (including Graphic Design, Illustration, Environmental Design, and Exhibition Design) Creative Photography

#### Certificate in Museum Studies TO TA OLDER INTERNATIONAL

#### Faculty

Bryan Cantley, Ruth Capelle, John Carter, Al Ching, Kyung Sun Cho, Dorte Christjansen, Eileen Cowin, Frank E. Cummings III, Darryl Curran, Robert Ewing, Maurice Gray, Thomas Holste, George James, Jim Jenkins, Jade Jewett, Lawrence Johnson, G. Ray Kerciu, Garland Kirkpatrick, Donald Lagerberg, Dana Lamb, Sergio Lizarraga, Clinton MacKenzie, Mike McGee, Jerry Rothman, Jerry Samuelson, Jon Stokesbary, Vincent Suez

Advisers and possibly at nottenimezed graves and all the Undergraduate: Contact department office. Graduate: Al Ching

#### INTRODUCTION

The Department of Art offers programs which include the scholarly fields of art history, theory, analysis and criticism; the studio fields of drawing and painting, printmaking, sculpture, crafts (including fibers, jewelry, wood and metal), ceramics (including glass), graphic design, creative photography, illustration, environmental design, and exhibition design; and the single subject teaching field of art education.

Curricular plans for the Bachelor of Arts and the Bachelor of Fine Arts have been developed to meet the individual needs and interests of students in art.

The general objectives of the programs are to provide a comprehensive learning environment which contributes technically and conceptually to the development of the art historian, the visual artist and the art teacher. Specifically, the programs provide opportunities for students to: (1) develop a knowledge and understanding of fundamental visual experience and concepts basic to many forms and fields of art; (2) develop a critical appreciation of historical and contemporary art forms as they relate to individual and social needs and values; (3) express creatively one's personal experience and thought with skill and clarity in visual terms; and (4) to develop this knowledge and skills necessary to pursue graduate studies in visual arts, or to teach art in the schools, and (5) develop the understanding and advanced specialized skills applicable to professional practice.

#### BACHELOR OF ARTS IN ART

The 124-unit Bachelor of Arts degree offers concentrations in Art History, General Studio Art, and Teaching. The program objectives are to provide correlative experiences, information and theory.

The Art History concentration provides for an emphasis in the area of art history, theory, and appreciation and is particularly recommended for those students who wish to pursue graduate studies in art history or museum studies.

The General Studio Art concentration is a general curriculum that provides a broad education in the visual arts.

The Teaching concentration is for students who wish to meet the requirements for single subject instruction (Ryan Act) for teaching art in grades K-12.

In addition to the requirements listed below for the major, students must meet the other university requirements for a bachelor of arts degree. Students in the Teaching concentration must also meet specific requirements for the desired teaching credential.

All art majors must take Art 300, Writing in the Visual Arts, and pass the university's Examination in Writing Proficiency (EWP) after achieving junior standing (60 units). Testing dates for the EWP are available from the Testing Center or the Academic Advisement Center.

To earn a Bachelor of Arts in Art students must achieve grades of C or better in all art courses required for the degree.

Preparation for the major (lower division — 21 units)

#### Art History Concentration

	Art 201A,B Art and Civilization
	Approved electives in art, American studies, anthropology, history, literature, music, philosophy or
	theatre 9
The	e major (upper division — 33 units)

Writing in the Visual Arts .....

480	Selected	Topics	in Art	Hist.				 			3
481	Seminar	in Art	Histor	y	 						3
Appr	oved uppe	er div.	elec								3

Upper division art history .....

## General Studio Art Concentration

ver Du	usion (2/ units)
103	Two-Dimensional Design 3
104	Three-Dimensional Design 3
107A	A,B Beginning Drawing and Painting
117	Life Drawing 3
201A	A,B Art and Civilization 6
Art I	Electives — Select at least two courses from two of
th	e following areas: design; printmaking; creative
ph	otography: sculpture: ceramics: crafts: drawing

Upper	Division (27 units)
3	00 Writing in the Visual Arts
A	art History
S	tudio area — include one course from each of the following: (1) drawing and painting; (2) sculpture, creative photography, printmaking; (3) crafts and ceramics; (4) design
F	lectives — Choose two courses from at least two dif-

Electives — Choose two courses from at least two dif-							
ferent categories of the following: drawing and							
painting; printmaking; creative photography; sculp-							
ture; crafts (fibers and glass); ceramics; graphic de-							
sign; illustration; environmental design; exhibition							
design; art education							

## Teaching Concentration

Single Subject Instruction — Ryan Act (Qualifies for Teaching Art in Grades K-12)

Preparation for the major (lower division - 30 units)

103 Iwo-Dimensional Design	3
104 Three-Dimensional Design	3
106A Beginning Ceramics	
107A,B Beginning Drawing and Painting	6
117 Life Drawing	3
201A,B Art and Civilization	6
205A Beginning Crafts	3
207A Drawing/Painting	

## Major requirements (upper division — 24 units) Select either Drawing/Painting or Crafts Emphasis: Drawing and Painting Emphasis: 317A Life Studies, Drawing and Painting ......... 3 347A Printmaking-Etching ...... 3 441A Media Exploration for Teaching Art ......... 3 Crafts Emphasis: Please emphasis: 4, AAT 300 Writing in the Visual Arts ..... 305A Advanced Crafts ..... 3 306A,B Advanced Ceramics ...... 6 312 Modern Art ..... 3 441A Media Exploration for Teaching Art .......... 3 Professional Preparation (24-27 units) Art Ed 442 Teaching Art in the Secondary School ...... 3 Education course work ...... 9-12 Student teaching (one semester full-time) ......... 12

## Program Requirements:

- Be advised by a faculty adviser in art education assigned by the art department chair.
- Fulfill credential requirements listed in the catalog within the School of Human Development and Community Service for the Ryan Act curriculum.
- 3. Meet the requirements listed under the Teaching concentration.
- 4. Complete the major requirements prior to enrolling in the teacher education program.
- Be admitted to teacher education through the School of Human Development and Community Service prior to enrollment in Art Ed 442, professional education courses and student teaching.
- Be accepted for teacher education and student teaching based on candidate quotas, portfolio review, and evidence of success in completed university course work.
- 7. Be recommended by the faculty adviser in art education.
- 8. Complete Secondary Education 310 and 386 or equivalents.
- 9. Pass C-BEST exam prior to admission to Teacher Education.
- 10. Have a G.P.A. of 2.89 overall, 3.0 in major.

#### Credential Information

Upon completion of the above program and the bachelor of arts degree, the student is eligible for a partial credential, which meets state requirements for teaching art in grades K-12. Within the specified period of time from the beginning of a teaching assignment, 30 units of course work must be completed at an accredited college or university to qualify for a clear credential. Credentials are issued from the institution where this requirement has been completed.

## Multiple Subject Instruction — Ryan Act

The following three courses are recommended for all students intending to teach in the elementary schools in multiple subject classrooms.

Art 380 Art and Child Development (3)
Music 333 Music and Child Development (3)
Theatre 402 Dramatic Activities for Children (3)

The following additional list of courses would be strongly recommended for students who wish to expand their knowledge in any or all of the arts:

Art 100, 101, 103, 104, 106A, 107A, 201A,B, 310A,B, 330, 380, 441A,B

Dance 101, 112, 122, 132, 142, 323A,B, 422

Music 111A,B, 184A,B, 251, 281B,P,S,W, 283

Theatre 100, 263, 276A, 277, 370A,B, 402A,B, 403A,B

## BACHELOR OF FINE ARTS IN ART

The Bachelor of Fine Arts degree is a professional program providing directed studies in nine studio concentrations within the visual arts. The program is designed for students seeking in-depth preparation for specialized goals selected from one of the following areas: drawing and painting; printmaking; sculpture; crafts; ceramics; graphic design; illustration; environmental design; or creative photography.

The program develops the understanding and advanced specialized skills applicable to professional practice, and to meet entrance requirements to graduate school.

#### Admission Requirements

All freshman students must apply to the B.A. (Bachelor of Arts) in Art program for their first semester of residence. After completing a minimum of 12 lower-division preparation units with B or better grades, students may contact the Art Department to change their objective to the B.F.A. in Art program.

Students who transfer from community colleges or other universities may apply to the BFA, providing they qualify. To qualify, they must have completed 12 units of studio art courses with B or better grades.

Program Requirements	Sculpture Concentration
The 132-unit Bachelor of Fine Arts degree program requires a minimum of 70 units in art, with 28 lower-division units of preparation and 42 upper-division units, including 24 units in an	Preparation (lower division — 28 units)  103 Two-Dimensional Design
area of concentration, six units of art history, three units of writing in art, and nine units of art electives. In addition to the minimum 70 unit requirement for the B.F.A. degree, students must meet the other university requirements for a bachelor's	104 Three-Dimensional Design
degree (see the university Catalog and Class Schedule).	216A,B Beginning Sculpture
To earn a Bachelor of Fine Arts in Art, students must achieve grades of C or better in all art courses required for the degree.  Drawing and Painting Concentration	300 Writing in the Visual Arts*       3         316A,B Sculpture       6         317A,B Life Studies, Drawing and Painting       6
Preparation (lower division — 28 units)  Units	326A Ceramic Sculpture
103Two-Dimensional Design3104Three-Dimensional Design3107A,BBeginning Drawing and Painting6	486A Special Studies, Sculpture
117 Life Drawing	Crafts Concentration
2074 B Drawing and Painting	Preparation (lower division — 28 units) Units
develop the moveday and state and solt to lis to	103 Two-Dimensional Design
Concentration (upper division — 42 units)  300 Writing in the Visual Arts*	104 Three-Dimensional Design
48/A,B and/or C	Concentration (upper division — 42 units) Units
Upper-division art electives and a college and the same forces	300 Writing in the Visual Arts of Association of Solect 9 units from:
Printmaking Concentration  Preparation (lower division — 28 units)  Units	306A,B Advanced Ceramics 315A,B Jewelry
103 Two-Dimensional Design	355A,B Fibers, Fabric Printing & Dyeing 364A,B Stained Glass
117 Life Drawing       4         201A,B Art and Civilization       6         207A Drawing and Painting       3         247 Beginning Printmaking       3	365A,B Weaving 485A,B,C,D,E, or F Special Studies in Crafts 6 495 Internship in Art
Concentration (upper division — 42 units) Units	6. Be accepted for teacher education and student teaching based
300 Writing in the Visual Arts 307A Drawing and Painting	Preparation (lower division — 28 units) Units
317A,B or C Life Studies	103 Two-Dimensional Design
338A Creative Photography	104 Three-Dimensional Design
347A, B. Printmaking-Etching, Lithography 6 487D Special Studies, Printmaking 6	106A,B Beginning Ceramics
Upper-division art history	107A,B       Beginning Drawing and Painting       6         117       Life Drawing       4         201A,B       Art and Civilization       6

Concentration (upper division — 42 units) Units
Concentration (upper division — 42 units)  Units  300 Writing in the Visual Arts*
306A,B Advanced Ceramics 6
326A,B Ceramic Sculpture 6
424A,B Glass Forming 6
484A or 484B Special Studies
Upper-division art history 6
Upper-division art electives
Graphic Design Concentration
Preparation (lower division — 28 units) The Preparation (lower division — 28 units) Units
103 Two-Dimensional Design
104 Three-Dimensional Design
107A,B Beginning Drawing and Painting 6
117 Life Drawing       4         201A,B Art and Civilization       6         223A,B Lettering, Typography & Rendering       6
201A,B Art and Civilization 6
223A,B Lettering, Typography & Rendering 6
Concentration (upper division — 42 units) Units
300 Writing in the Visual Arts* 3
323A,B Graphic Design
338A Creative Photography
338A Creative Photography
483A Special Studies, Graphic Design 6
495 Internship 3
Upper-division art history 6
Upper-division art electives 9
Illustration Concentration
Illustration Concentration  Preparation (lower division — 28 units)  Units
Preparation (lower division — 28 units)  Units
Preparation (lower division — 28 units)  Units  103 Two-Dimensional Design
Preparation (lower division — 28 units)  103 Two-Dimensional Design
Preparation (lower division — 28 units)  103 Two-Dimensional Design
Preparation (lower division — 28 units)  103 Two-Dimensional Design
Preparation (lower division — 28 units)       Units         103 Two-Dimensional Design
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Preparation (lower division — 28 units)  103 Two-Dimensional Design
Preparation (lower division — 28 units)         Units           103 Two-Dimensional Design
Preparation (lower division — 28 units)         Units           103 Two-Dimensional Design         3           104 Three-Dimensional Design         3           107A,B Beginning Drawing and Painting         6           117 Life Drawing         4           123A Descriptive Drawing         3           201A,B Art and Civilization         6           223B Lettering, Typography & Rendering         3           Concentration (upper division — 42 units)         Units           300 Writing in the Visual Arts         3           317A,B Life Studies, Drawing and Painting         6           323A Graphic Design         3           363A,B Illustration         6           483C Special Studies, Illustration         6           495 Internship         3           Upper-division art history         6           Upper-division art electives         9           Environmental Design Concentration         Preparation (lower division — 28 units)         Units           103 Two-Dimensional Design         3
Preparation (lower division — 28 units)         Units           103 Two-Dimensional Design         3           104 Three-Dimensional Design         3           107A,B Beginning Drawing and Painting         6           117 Life Drawing         4           123A Descriptive Drawing         3           201A,B Art and Civilization         6           223B Lettering, Typography & Rendering         3           Concentration (upper division — 42 units)         Units           300 Writing in the Visual Arts         3           317A,B Life Studies, Drawing and Painting         6           323A Graphic Design         3           363A,B Illustration         6           483C Special Studies, Illustration         6           495 Internship         3           Upper-division art history         6           Upper-division art electives         9           Environmental Design Concentration           Preparation (lower division — 28 units)         Units           103 Two-Dimensional Design         3           104 Three-Dimensional Design         3           107A B Beginning Drawing and Painting         6
Preparation (lower division — 28 units)         Units           103 Two-Dimensional Design         3           104 Three-Dimensional Design         3           107A,B Beginning Drawing and Painting         6           117 Life Drawing         4           123A Descriptive Drawing         3           201A,B Art and Civilization         6           223B Lettering, Typography & Rendering         3           Concentration (upper division — 42 units)         Units           300 Writing in the Visual Arts         3           317A,B Life Studies, Drawing and Painting         6           323A Graphic Design         3           363A,B Illustration         6           483C Special Studies, Illustration         6           495 Internship         3           Upper-division art history         6           Upper-division art electives         9           Environmental Design Concentration         Preparation (lower division — 28 units)         Units           103 Two-Dimensional Design         3

123B Descriptive Drawing
further graduate work in the field. The program offers the follow-
Concentration (upper division — 42 units) Units  300 Writing in the Visual Arts
313A,BEnvironmental Design6333A,BEnvironmental Design6453AExhibition Design3483BSpecial Studies, Environmental Design6495Internship in Art3Upper-division art history6Upper-division art electives9
tion as the graduate degree objective from an accredited
Creative Photography Concentration
Preparation (lower division — 28 units) Units
103 Two-Dimensional Design
Concentration (upper division — 42 units) Units Units
300 Writing in the Visual Arts*
MINOR IN ART
Twenty-four units with a grade of C or better are required for a minor in art; a minimum of 12 units are to be in upper division courses and in residence. A basic course in each of the following

Twenty-four units with a grade of C or better are required for a minor in art; a minimum of 12 units are to be in upper division courses and in residence. A basic course in each of the following areas is required: (1) art history, theory, analysis and criticism; (2) design; (3) drawing and painting; and (4) crafts. Recommended courses to meet the "basic courses" requirement are: (1) Art 201A or B; (2) Art 103 or 104; (3) Art 107A or B; (4) Art 106A or 205A. Completion of these courses will provide a reasonable foundation for entry into upper division courses. Those students planning to qualify for a standard teaching credential with specialization in elementary or secondary teaching and art for a minor must obtain approval from the Art Department for the courses selected to meet the upper division requirements for a minor in art.

<sup>\*</sup>Students must also take and pass the Examination in Writing Proficiency (EWP).

#### MASTER OF ARTS IN ART

This program provides a balance of study and practice for those who wish a career in the visual arts, or who want to prepare for further graduate work in the field. The program offers the following areas of concentration: (1) drawing and painting (including printmaking); (2) sculpture; (3) crafts (including ceramics, wood, glass, fibers, jewelry/metalsmithing); (4) design (including environmental design, graphic design, illustration, exhibition design, or creative photography); and (5) art history.

#### Admission Requirements

- 1. Conditionally classified standing:
  - a. A baccalaureate degree in art with the same concentration as the graduate degree objective from an accredited institution, or 24 upper division units in art of which 12 units must be in a concentration completed with grades of B or better. Applicants are advised that most upper-division courses require lower-division prerequisites. A faculty adviser should be consulted with regard to recommended courses.
  - GPA minimum of 2.5 in the last 60 semester units attempted.
  - c. (1) Studio program: satisfactory review of preliminary portfolio by a faculty member in the area of studio concentration.
    - (2) Art history program: satisfactory preliminary interview by a faculty member in art history.
  - d. Enrollment is allowed in graduate-level courses with the exception of Art 500A,B; 511; 512; 597; and 598.
  - e. Passing the comprehensive review will be required for classified standing.

#### 2. Classified standing:

The same requirements as conditionally classified plus:

- a. Pass comprehensive review: held semi-annually, the comprehensive review is an evaluation of the candidate by a committee comprised of faculty teaching in the area of concentration. The committee reviews the student's creative work, statement of purpose, academic and other relevant qualifications; assigned research papers are required of art history applicants in lieu of a portfolio. Procedures, dates, and appointment times are available through the art department graduate office.
- b. Form a graduate committee. The mando team tomat is
  - c. Development of an approved study plan.
  - d. Art history program: reading knowledge of a foreign language may be required before advancement to candidacy.

#### Study Plan

The degree program requires 30 units of graduate study approved by the student's graduate committee of which 15 must be 500level courses. The 30 units are distributed as follows:

stinu 34A or 484B Special Studies With the AAR Units

- Core courses in art history, philosophy, analysis and criticism
  - a. Studio program: ( and a second program)

Art 500A Graduate Seminar in Major Field (3 units)

Art history program:

Art 511 Seminar on the Content and Method of Art History (3 units) (ADMISSION WITH CLASSIFIED STANDING ONLY)

b. Studio Program:

Art 500B Graduate Seminar in Major Field (3 units)

Art history program:

Art 512 Seminar on Selected Topics in Art History (3 units) (ADMISSION WITH CLASSIFIED STANDING ONLY)

- c. Art 481 Seminar in Art History (3 units), or substitute of a 400-level course in art history, theory, analysis or criticism on the recommendation of the major adviser.
- - a. Drawing and painting (including printmaking)
  - b. Sculpture
  - c. Crafts (including ceramics, glass, fibers, wood, jewelry/metalsmithing)
  - d. Design (including environmental design, graphic design, illustration, exhibition design, or creative photography)
  - e. Art history

The M.A. study plan must be completed with a B average, and all courses in the area of concentration be completed with grades of B or better. Every graduate student is required to demonstrate writing ability commensurate with the baccalaureate degree. Please refer to the section on Graduate Regulations for further clarification. The Department of Art requires the studio candidate for the Master of Arts in Art to exhibit the project in one of the department's graduate galleries prior to graduation. The art history candidate is required to submit a written thesis based on a specific topic of research.

For further information consult the graduate program adviser and read the University Graduate Regulations section of this catalog.

#### MASTER OF FINE ARTS IN ART

The Master of Fine Arts in Art features a rigorous studio program for the seriously committed, responsible and talented student. The curriculum and faculty challenge the students to focus on the goal of becoming professional artists.

The M.F.A. program provides in-depth study within a 60-unit approved study plan in the following areas of concentration: (1) design (including graphic design, illustration, environmental design, and exhibition design); (2) ceramics (including glass); (3) crafts (including fibers, jewelry/metalsmithing, and woodworking/furniture); (4) sculpture; (5) drawing, painting, and printmaking; and (6) creative photography.

#### Admission Requirements

- 1. Conditionally classified standing:
- a. a baccalaureate degree in art with the same concentration as the graduate degree objective from an accredited institution, or 24 upper division units in art, 18 of which must be in the concentration completed with grades of B or better. Applicants are advised that most upper-division courses require lower-division prerequisites.
- b. a minimum grade-point average of 2.5 in the last 60 units attempted and have been in good standing at the last college attended.
- c. participate in comprehensive portfolio review: held semiannually, the comprehensive portfolio review is an evaluation of the candidate by a committee comprised of faculty teaching in the area of concentration. The committee reviews the student's creative work, statement of purpose, academic and other relevant qualifications. Procedures, dates, and appointment times are available through the art department graduate office.

If the student's portfolio is not adequate, the applicant could still be recommended for conditionally classified standing by the faculty comprehensive review committee. However, the comprehensive portfolio review must be repeated.

- d. Conditionally classified students may enroll in graduate courses with the exception of Art 500A, B; 511, 512, 597; and 598.
- 2. Classified standing:

The same requirements as a. and b. for conditionally classified standing plus:

- a. pass comprehensive portfolio review.
- b. form a graduate committee.
- c. develop an approved study plan. A man A to the Man

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The M.F.A. degree program requires 60 units of graduate study approved by the student's graduate committee and the dean of graduate studies. The study plan must be completed with a grade-point average of 3.0 or better. The courses in the concentration must be completed with a grade of "B" or better. The 60 unit study plan is distributed as follows:

Areas			Units
		mi stim	
Theory, criticism: Art 500A,	500B	 	6
History		 	9
Area of concentration			
Electives in art		 	12
Independent study: research .			
Project			
Total		 (noin	60

#### Master of Fine Arts Project

The M.F.A. project exhibition constitutes a professional oneperson art exhibit. It is installed in one of the department's graduate galleries and announced for public view by the student as the final phase of the M.F.A. program requirements.

The Department of Art is nationally accredited at the highest level of quality and professionalism (Division I) by the National Association of Schools of Art and Design. For further details on the comprehensive portfolio review, communicate with the graduate coordinator or graduate secretary in the art department, Visual Arts 102 (714/773-3471).

#### POSTBACCALAUREATE UNCLASSIFIED

Students who do not have the prerequisites to qualify for the graduate program may apply to the university as a postbaccalaureate-unclassified student. Typically, students in this category have a bachelor's degree in art but need to work on the prerequisites for a different concentration or did not major in art and must work on courses for the 24 upper division art units requirement. To qualify for admission an applicant must hold a baccalaureate degree from an accredited institution, have attained a grade-

point average of at least 2.5 in the last 60 units attempted and have been in good standing at the last college attended. Admission with postbaccalaureate standing does not constitute admission to the art graduate program or graduate degree curricula.

#### CERTIFICATE IN MUSEUM STUDIES

Courses leading to the certificate are designed to educate students in museum practices in preparation for entry into the museum profession. The curriculum includes instruction in the historical development and philosophical basis of collections, exhibitions and their design, and curatorship. A museum internship is required. The certificate in museum studies may be undertaken as a self-contained program or may be taken in conjunction with the Master of Arts in Art degree or the Master of Fine Arts in Art degree or, by special permission, with other graduate degrees in the university. (For an M.A. or M.F.A. in Art degree with an exhibition design emphasis see M.A. and M.F.A. emphases under the design concentration.)

#### Prerequisites

- 1. B.A. in Art or other major by special permission
- 2. Specific course prerequisites:
  - a. 12 units in upper-division art history
  - b. 6 units in graphic design and exhibition design
  - c. 3 units of advanced writing (Communications 435 Editorial and Critical Writing; or Communications 362 Public Relations Writing; or English 301 Advanced College Writing)
  - d. 3 units of beginning accounting Tank and lo retail.

### Study Plan, art to ano in ballatari it is installed in one of the carried

The certificate program requires 24 units. The 24 units are distributed as follows:

stinU Department of Art is nationally accredited at the highest
level of quality and professionalism (Division I) by the National
Art 464 Museum Conservation
Art 481 Seminar in Art History
Art 483D Exhibition Design
Art 495 Internship in Art
Art 501 Curatorship 3
Art 503D Exhibition Design
Course in museum education
-melacoada Total as viletaviau acti of vings van merwag assubs 24
eate-unclassified student. Typicallynesuslands in ethis dategory

For further information, consult the Department of Art.

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# Art Courses

# 100 Exploratory Course in Art (3)

Use of a variety of art materials, processes and concepts. Field trips required. Not open to art majors for credit except by permission of Art Department. (6 hours activity)

# 101 Introduction to Art (3) 11 A of the A to spread and sol and

Historical and contemporary art forms of painting, sculpture, architecture and design. Field trips required. Not open to art majors for credit except by permission of Art Department.

# 103 Two-dimensional Design (3)

Materials, concepts and elements of two-dimensional visual organization. (6 hours activity) (CAN ART 14)

# 104 Three-dimensional Design (3)

Materials, concepts and elements of three-dimensional visual organization. (6 hours activity) (CAN ART 16)

# 106A Beginning Ceramics (3)

Form as related to ceramic materials, tools, processes. Kiln loading and firing, hand building, wheel throwing and raku. Instructional fee. (9 hours laboratory) (CAN ART 6)

### 106B Beginning Ceramics (3)

Prerequisites: Art 106A. Form as related to ceramics. Glaze batching and its application, and the presentation of ceramic technique. Instructional fee. (9 hours laboratory)

#### 107A Beginning Drawing (3) was befiseed yllenoutlened. I

The traditional and contemporary use of drawing materials integrated with visual experiences and concepts. (6 hours activity) (CAN ART 8)

### 107B Beginning Painting (3)

The traditional and contemporary use of painting materials integrated with visual experiences and concepts. (6 hours activity)

### 117 Life Drawing (1) 285 245 In on about municipals and

The live model. May be repeated to a maximum of 4 units. Duplicate enrollment of this course within the same semester is permissible. (3 hours activity for each unit)

#### 123A Descriptive Drawing (3)

Descriptive drawing, rendering techniques and theories representing forms of nature. (6 hours activity)

# 123B Descriptive Drawing (3)

The use of linear perspective with lights and shadows to correctly describe fabricated and mechanical forms. (6 hours activity)

# 201A,B Art and Civilization (3,3)

The ideas, forms and styles of the visual arts as they developed in various cultures from prehistoric time to the present. ( $201A = CAN \ ART \ 2$ ,  $201B = CAN \ ART \ 4$ )

205A Beginning Crafts (3)

Traditional and contemporary concepts and processes with emphasis on design principles in the development of esthetic forms based on function. (9 hours laboratory)

205B Beginning Crafts (3)

Prerequisites: Art 103, 104 and 205A. Art 104 may be taken concurrently. The development of esthetic forms based on function, with emphasis on design principles and the creative use of hand tools and power equipment. (9 hours laboratory)

#### 207A,B Drawing and Painting (Experimental Methods and Materials) (3,3)

Prerequisites: Art 117, 107A, B or equivalents. Traditional and contemporary methods and materials. (6 hours activity)

213A Beginning Environmental Design (3)

Prerequisites: Art 103 and 104. Design methodology and communication skills in the environmental design field. (6 hours activity)

213B Beginning Environmental Design (3)

Prerequisites: Art 103, 104; 213A or equivalent. Design methodology and communication skills in the environmental design field. (6 hours activity)

216A,B Beginning Sculpture (3,3)

Prerequisite: Art 104. The creative use of wood and metal, power equipment and hand tools. Instructional fee. (9 hours laboratory) (216A = CAN ART 12)

223A Lettering and Typography (3)

Prerequisite: Art 103. The history, design and use of letter forms; the rendering and use of hand-lettered forms. Instruction fee. (6 hours activity) (E) nonantulli-oxodi Ages

223B Lettering, Typography and Rendering (3)

Prerequisite: Art 223A. The history, design and use of letter forms; techniques for rough and comprehensive layouts and introduction to computer graphics. Instruction fee. (6 hours activity)

238 Photo Visual Concepts (3) (E) pointradell good figer Prerequisite: Art 103. An Introductory photography course for art majors. Course content includes the study of photographic vision and design, visual conceptualization and examination of the qualities of light through the use of instant and automatic cameras.

247 Beginning Printmaking (3) Prerequisite: Art 107A, B. An exploration of woodcut, linocut and monoprint as a medium of personal expression. Instructional fee. (9 hours laboratory)

300 Writing in the Visual Arts (3)

Principles, practices and objectives of writing in the visual arts. Includes descriptive, analytical and expressive essays; project and grant proposals; artist's statements; resumes; and professional correspondence. Satisfies the classroom portion of the upper-division writing requirements for art majors.

#### 301 Ancient Art (3)

The developments in art from the Paleolithic to late antiquity.

### 302 Medieval Art (3)

The developments in art from the late antiquity through the Gothic.

303 Architectural and Interior Rendering (3)

Prerequisite: Art 123B or consent of instructor. Rendering of architectural, interior and landscape environments, utilizing mechanical perspective and contemporary design drawing delineation techniques. Mixed media. (6 hour activity)

305A,B Advanced Crafts (3,3)

Prerequisites: 205A and 205B. Advanced concepts and processes in the development of esthetic forms based on function, emphasizing individual growth and personal expression. (9 hours laboratory)

# 306A,B Advanced Ceramics (3,3)

Prerequisite: Art 103, 104 and 106A, B or consent of instructor. Forms and the creative use of ceramic concepts and materials: design, forming, glazing and firing. Instructional fee. (9 hours 

307A,B Drawing and Painting (3,3) and glass to application

Prerequisites: Art 107A,B, 117, 207A,B or equivalents. The concepts, materials and activities of drawing and painting, emphasizing individual growth, plan and craft. (6 hours activity)

310A,B Watercolor (3,3) adverding sologoning latinophysical

Prerequisite: Art 107A, B or equivalents. An exploration of watercolor media related to varied subject matter and design applications. Includes field trip activity. Provides skills and concepts useful for school art programs. (6 hours activity)

311 Foundations of Modern Art (3)

Prerequisite: upper division standing. The history of painting and sculpture from the French Revolution to the end of the 19th century.

312 Modern Art (3)

Prerequisite: upper division standing. The history of painting, graphic arts and sculpture from late 19th century to World War II.

313A Environmental Design: Unit Concepts (3)

Prerequisites: Art 103, 104 and 213A, B. Environmental design projects and the study of unit concepts. (6 hours activity)

313B Environmental Design: Systems Concepts (3)

Prerequisite: Art 313A. Environmental design projects and systems concepts. (6 hours activity)

315A,B Jewelry (3,3)

Prerequisites: Art 205A and 305A. Art 305A may be taken concurrently. Design and creation of jewelry. (9 hours lab)

316A,B Sculpture (3,3)

Prerequisites: Art 104 and 216A. Sculptural materials and processes. Instructional fee. (9 hours laboratory)

317 Life Studies (3)

Prerequisites: three units lower division life drawing. Drawing, painting and sculpture from the live model. (9 hours lab)

317A Drawing and Painting

317B Drawing and Painting

317C Sculpting

318A Drawing and Painting the Head and Hands (3)

Prerequisites: Art 107A,B and Art 117. Specialized problems in construction and anatomy of the human head and hands, and their principal use in drawing, painting and illustration. (9 hours laboratory)

318B Portraiture (3)

Prerequisites: Art 107A, 107B, 3 units of Art 117. Comprehensive problems in composition, concept, content and execution of portraits.

319 Landscape Painting (3)

Prerequisites: Art 107A and B. Contemporary concepts and techniques of painting the landscape.

320 History of Architecture Before the Modern Era (3)

A study of selected monuments from Stonehenge through the late Baroque. Interrelationship between patronage, style, function, structural principles and technological developments.

323A,B Graphic Design (3,3)

Prerequisites: Art 103, 223A and 223B or consent of instructor. Development and projection of ideas in relation to the technical, esthetic and psychological aspects of advertising art. Instructional fee. (6 hours activity)

324 Glass Casting (3)

Prerequisites: Art 103 and 104 or consent of instructor. Hot glass laboratory equipment and casting techniques. Designing molds and handling hot glass. Instructional fee. (9 hours laboratory)

326A,B Ceramic Sculpture (3,3)

Prerequisites: Art 103, 104, 117 or consent of instructor. Development of ceramic technology into individual sculptural forms and techniques. Instructional fee. (9 hours laboratory)

327 Mural Painting (1)

Prerequsites: Art 107A and Art 107B or equivalents. A brief history of important muralists, their contributions and methods. Topics include: narrative murals; symbolic murals, ephemeral murals, contemporary graffiti, billboard art, drawing systems and technical information. Repeatable once for credit. (9 hours lab)

330 Fibers and Papers (3) how foll along the residence of

Prerequisites: Art 103 and 104, or consent of instructor. The use of fibers and papers as an art form. (9 hours laboratory)

333A Environmental Design (3)

Prerequisite: Art 213A, B. Aesthetics of space and form concepts as design determinants. (6 hours laboratory)

333B Environmental Design (3)

Prerequisite: Art 333A. Aesthetics of space and form as design determinants; experimental design concepts and methods. (6 hours activity) Johnson American For bone 2017 A sentenperer P

336A,B Casting Techniques and Theories of Cast Sculpture (3,3)

Prerequisite: Art 316A. Waxing, molding and metal casting techniques. Aluminum and bronze and the lost wax process. (9 hours laboratory)

338A Creative Photography (3)

Prerequisite: Art 103 or its equivalent. The photographic media in personal expression. Historical attitudes and processes; new materials and contemporary esthetic trends. Field trips required. Instructional fee. (9 hours laboratory)

338B Creative Photography (3)

Prerequisite: Art 338A. The photographic medium in personal expression. Historical and new processes. Field trips required. Instructional fee. (9 hours laboratory)

339A Photo-Illustration (3)

Prerequisites: Art 103 and 338A. The use of specialized photographic techniques such as lighting, camera position, color and motion for solutions to illustration problems of narration, visual description, juxtaposition and imagery. Instructional fee. (9 hours laboratory)

339B Photo Illustration (3)

339B Photo Illustration (3)
Prerequisites: 338A and 339A, or consent of instructor. Concepts and attitudes in the field of photo illustration. Illustration problems using narrative, visual description, juxtaposition and imagery. Instructional fee.

347A Printmaking Etching (3)

Prerequisites: Art 107A, B, 117, and 247. Concept development, exploration and materials involved in printmaking techniques. Includes etching, aquatint. Instructional fee. (9 hours laboratory)

347B Printmaking Lithography (3) Prerequisites: Art 107A, B, 117, and 247. Concept development, exploration and materials involved in lithography. Instructional fee. (9 hours laboratory)

348 Artists' Books (3) (vilvina suori d) spolasticulii Orba

Prerequisites: Art 103, 107A or 247, or consent of instructor. Personal vision and concepts applied to the book form as art; the history and aesthetics of artists' books.

355A,B Fibers: Fabric Printing and Dyeing (3,3)

Prerequisites: Art 103, 107A or B or consent of instructor. Design concepts and printing and dyeing processes as applied to fabrics. (9 hours laboratory)

357 Woodcuts and Monotypes (3)

Prerequisites: Art 107A and Art 107B or equivalents. The exploration of the woodcut and monotype as a means of personal expression. Emphasis on traditional as well as contemporary materials and trends. Course may be repeated once for credit. (9 hours lab) water Senting in Maker Field (galerate) see O files

363A,B Illustration (3,3)

Prerequisites: Art 103, 107A, B and 117. Story, book, magazine, and film illustration. (6 hours activity)

364A,B Stained Glass (3,3)

Leaded and stained glass; individual exploration, growth, planning and craftsmanship. (6 hours activity)

365A,B Fibers: Weaving (3,3) Prerequisites: Art 103 and 104 or 205A, B or consent of instructor. The use of the loom and weaving processes to design and create fiber and fabric art forms. (9 hours laboratory)

371 History and Theory of Design (3)

Prerequisites: Art 201A and B. The chronology of design in relation to the philosophical and theoretical ideologies which have, along with related socio-political and economic conditions, influenced its implementation and development.

380 Art and Child Development (3)

Art concepts, materials and processes as they relate to child development. (6 hours activity) as to mumidian a sestimosterial and painting, or consent of instructor, Maximum of 12 units, but

413 History of Contemporary Art (3)

Prerequisites: 312 and 461B or consent of instructor. A historical perspective of contemporary art beginning with major developments in Europe and the United States in the 1950's. Emphasis on new materials, new exhibition methods, and in particular the major conceptual issues raised by individual artists and groups.

420 History of Modern Architecture (3)

Prerequisite: Art 201B (art majors) or Art 101 (non-art majors). Development of modern architecture. The interrelationship among architecture, technology and society, from the industrial and political revolutions of the 18th century to the present. Exploration of national differences and various approaches to city planning.

423 Computer Animation (3) Prerequisites: Art 313A or 323A or 363 or equivalent. The exploration of advanced computer application in the creation of visual images and concepts through three-dimensional modeling and animation. Field trips required. Instructional fee.

424A,B Glass Forming (3,3)

Prerequisites: Art 103, 104, 324 or consent of instructor. The chemistry, handling and manipulation of glass and its tools and equipment for the ceramic artist. Instructional fee. (9 hours Prerequisites Art 453A, six units of art history or are

431 Renaissance Art (3) And the grown and the sales aring bigs Prerequisite: Art 201B (art majors) or Art 101 (non-art majors). Painting, sculpture and architecture from the late 13th to 16th century in Italy.

432 Baroque Art (3) (E) notresulta museuM 304

Painting, sculpture and architecture of the 17th century in Euof museum education, its philosophy and issues. Relate agor with other museum departments, outreach programs, new section

438A,B Creative Color Photography (3,3)

Prerequisites: Art 338A, B. Concepts and techniques in creative color photography. Historical attitudes and contemporary trends. Personal involvement with the medium. Instructional fee required. Instructional fee. (9 hours laboratory)

441A,B Media Exploration for Teaching Art (3,3)

Prerequisites: Art 103, 104, 107A, B, 205A or consent of instructor. Exploring the art media used in secondary school art programs today. Materials for secondary art curriculum. Two and three dimensional media in subject matter applications. (6 hours activity) to vest seed on gambular gees lausiv ent or supinu concepts in the art market, traditional roles in cultural context

443 Studio Graphics (3) Tolera state a free angel stab oil office

Prerequisites: Art 223A, B and 323A, B. Admission by interview and portfolio review. Studio production of graphics for the School of the Arts, including printed mailers, posters, booklets, catalogs, advertisements. Students experience designer/client relationships and translate concepts into production. (9 hours activity) May be repeated once for credit.

448 Special Studies: Artists' Books and Art (3)

Prerequisites: Art 102, 107A, or 347A/348 or consent of instructor. A studio art course for advanced students who want to continue to explore the book form as it relates to their personal aesthetic goals. While d documents and a country betagger ad yell

#### 453A,B Exhibition Design (3,3)

Technical and esthetic experience in problem-solving exhibition design concepts, evaluation and design analysis. The production of exhibitions in the University Art Gallery, their selection, design, installation, lighting and supportive interpretive material. (More than 9 hours laboratory)

#### 460B Pre-Columbian Art (3)

Prerequisites: Art 201A, B or consent of instructor. An introduction to the art and architecture of Meso and South America from the early formative stage to the Spanish Conquest. Emphasis on esthetic achievement with varying contexts of pre-Columbian visual images and concepts through three-dimensional and animation. Field trips required, instructional fee

#### 461 American Art: 20th Century (3)

Painting and sculpture in America during the 20th century. The role of the visual arts in helping to define, reflect and challenge American values and institutions.

# 464 Museum Conservation (3)

Prerequisite: Art 453A, six units of art history or anthropology. The examination of the preservation of objects; the history, role and principles of conservation within a museum context. Three combined sessions at Conservation Center, LACMA; Huntington Library; J. Paul Getty Museum; and Museum of Cultural History, UCLA.

#### 466 Museum Education (3)

432 Baroque Art (3) Prerequisite: six units 300-400 Art History or equivalent. History of museum education, its philosophy and issues. Relationship with other museum departments, outreach programs, new technology. Events organization, writing interpertive materials, budgets and grants, conducting tours. Lectures, field trips and guest speakers.

### 470 History and Esthetics of Photography (3)

Prerequisites: 201A, B. Photography from ancient optical observations through 19th-century invention to 20th-century acceptance as an art form. Esthetic movement and influential innovators. Lectures, slides and class discussion.

#### 475 Professional Practices in the Arts (3)

Prerequisite: Art major with junior or above standing. Practices unique to the visual arts, including an overview of changing concepts in the art market, traditional roles in cultural context, portfolio development, strategies for protecting ideas and avoiding abuses, and long term professional development.

# 480T Selected Topics in Art History (3)

Prerequisites: Art 201A or B and consent of instructor. Detailed study of the work of individual artists, patronage in particular places, specific pictorial, sculptural and architectural programs or art history periods. Topics will be listed in the class schedule. Repeatable if topic is different.

#### 481 Seminar in Art History (3)

Prerequisite: six units upper-division art history or equivalent. Study and evaluation in one area of art history and appreciation. May be repeated up to a maximum of 6 units.

#### 483 Special Studies in Design (3)

Prerequisite: a minimum of six upper-division units in area emphasis or equivalent. Maximum of 12 units, but no more than 3 units in any one area in a single semester.

483A Graphic Design Instructional fee. (6 hours activity)

483B Environmental Design (6 hours activity)

483C Illustrations (6 hours activity) (E) Model Comma 848

483D Exhibition Design (More than 9 hours laboratory)

### 483E Computer Assisted Graphics (3)

Prerequisites: Art 313A or Art 323A or Art 363A and consent of instructor. Theory and practice of design using the computer. Students will explore the numerous applications of the computer through lecture demonstration, studio/laboratory experience, guest speakers and field trips. Maximum of 12 units. Instructional

# 484 Special Studies in Ceramics (3)

Prerequisite: a minimum of six upper-division units in ceramics. Maximum of 12 units, but no more than three units in any one area in a single semester. Instructional fee. (9 hours laboratory)

484A Ceramics 484B Glass Forming

484C Glass Casting

# 485 Special Studies in Crafts (3) ATOL FOLTER ASSISTED PROTEIN

Prerequisite: a minimum of six upper-division units in designated area or consent of instructor. Maximum of 12 units, but no more than three units in any one area in a single semester. (9 hours laboratory) and more than a fembruilars assis benists has believed

363 A.B Illustration (3,3)

485A Jewelry (valvinas anod d) andensmerkin bas gain

485B General Crafts

485C Metalsmithing

485D Fibers — Weaving
485E Fibers — Fabric Printing and Dyeing

485F Fibers and Fabrics 1985 And 1985 A create fiber and fabric art forms. (9 hours

#### 486 Special Studies in Sculpture (3)

Prerequisites: Art 316A,B and consent of instructor. Maximum of 12 units but no more than three units in a single semester. (9 hours laboratory) (2008 post box landgo-oling ada as notisias

486A Modeling and Fabrication Instructional fee.

486B Casting level ben nederlemented in beneulter anon

#### 487 Special Studies in Drawing and Painting and Printmaking (3)

Prerequisites: a minimum of six upper-division units in drawing and painting, or consent of instructor. Maximum of 12 units, but no more than three units in any one area in a single semester. 487A Painting (6 hours activity)

487B Life Studies: Drawing and/or Painting (9 hours labora-

487C Drawing (6 hours activity)

487D Printmaking Instructional fee. (9 hours laboratory)

489 Special Studies in Creative Photography (3)

Prerequisite: a minimum of six upper-division units in photography courses or equivalent. Photography as personal expression. Maximum of 12 units but no more than three units in a single semester. Instructional fee. (9 hours laboratory)

#### 491 Professional Seminar (3)

Guest speakers from professions in the visual arts. A lecture/discussion seminar relevant to current issues and concepts in making and experiencing art. Topics will differ each semester. For the senior and graduate art major. May be repeated up to a maximum of 6 units.

#### 495 Internship in Art (3)

Prerequisite: senior standing as a declared BFA in Art major. Work in a specific art field in business or industry.

#### 499 Independent Research (1-3)

Open to advanced students in art with consent of department chair and written consent of instructor. May be repeated for credit.

#### 500A Graduate Seminar in Major Field (3)

Prerequisite: classified standing. Problems and issues in art. Intellectual clarification and verbal articulation of individual intent as an artist. Oral and written material in support of the master's project. (with 500B meets graduate level writing requirement).

#### 500B Graduate Seminar in Major Field (3)

Prerequisite: Art 500A. Directed research in the area of major emphasis. Oral and written material on historical backgrounds and developments in art as they relate to individual intent as an artist (stated in Art 500A) and in support of the master's project. (with 500A meets graduate level writing requirement)

#### 501 Curatorship (3)

Prerequisites: B.A. in art, anthropology or other major by special permission, and Art 481 and 466. The curator collects, cares for and studies objects.

#### 503 Graduate Problems in Design (3)

Prerequisite: consent of instructor. Planning, development and evaluation of individual projects listed below. Maximum of 12 units in each area, but no more than three units in any one area in a single semester.

503A Graphic Design (6 hours activity)

503B Environmental Design (6 hours activity)

503C Illustrations (6 hours activity)

503D Exhibition Design (More than 9 hours laboratory)

#### 504 Graduate Problems in Ceramics (3)

Prerequisite: consent of instructor. Planning, development and evaluation of individual projects in ceramics, glass forming and glass casting. Maximum of 12 units in each area but no more than three units in a single semester. Instructional fee. (9 hours laboratory)

504A Ceramics 504B Glass Forming 504C Glass Casting

# 505 Graduate Problems in Crafts (3)

Prerequisite: consent of instructor. Planning, development and evaluation of individual projects listed below. Maximum of 12 units in each area but no more than three units in a single semester. (9 hours laboratory)

President Art 211. Stat printer con

505A Jewelry

505B General Crafts

505D Fibers Weaving, Fibers and Fabrics

#### 506A,B Graduate Problems in Sculpture (3,3)

Prerequisite: consent of instructor. Planning, development and evaluation of individual projects in sculpture. Maximum of 12 units in each area but no more than three units in a single semester. Instructional fee. (9 hours laboratory)

# 507 Graduate Problems in Drawing, Painting and Printmaking (3)

Prerequisite: 12 units of upper-division drawing and painting. Planning, development and evaluation of individual projects listed below. Maximum of 12 units in each area but no more than three units in a single semester.

507A Painting (6 hours activity)

507B Life Drawing (9 hours laboratory)

507C Drawing (6 hours activity)

507D Printmaking Instructional fee. (9 hours laboratory)

#### 508A,B Graduate Problems in Creative Photography (3,3)

Prerequisite: Consent of instructor. Planning, development and evaluation of individual projects in photography. Maximum of 12 units in each area, but no more than three units in a single semester. (9 hours laboratory)

#### 511 Seminar on the Content & Method of Art History (3)

Prerequisite: Art 481 and/or consent of instructor. Methods of research, analysis and theories of art historical scholarship. May be repeated up to a maximum of 6 units.

#### 512 Seminar on Selected Topics in Art History (3)

Prerequisite: appropriate upper-division Art course approved by instructor and Art 511. Analysis and evaluation of specific works and their historical significance including cultural, social and economic circumstances. May be repeated up to a maximum of 6 units.

#### 597 Project (3 or 6)

Prerequisites: Art 500A,B, written consent of instructor and recommendation of the student's graduate committee. Art 500B may be taken concurrently with Art 597 on approval of instructor. Development and presentation of a creative project in the concentration beyond regularly offered coursework.

#### 598 Thesis (3 or 6)

Prerequisites: Art 511, 512, written consent of instructor and recommendation of the student's graduate committee.

#### 599 Independent Graduate Research (1-3)

Open to graduate students in art with consent of department chair and written consent of instructor. May be repeated for credit.

# **Art Education Courses**

#### 442 Teaching Art in the Secondary School (3)

Prerequisite: admission to teacher education. Objectives, methods and practices for teaching art in secondary schools. Required before student teaching of majors in art for the single subject teaching credential.

#### 449E Externship in Secondary Teaching (3)

For candidates who have declared for the Ryan Act credential. See description and prerequisites under Division of Teacher Education. Offered every fall semester.

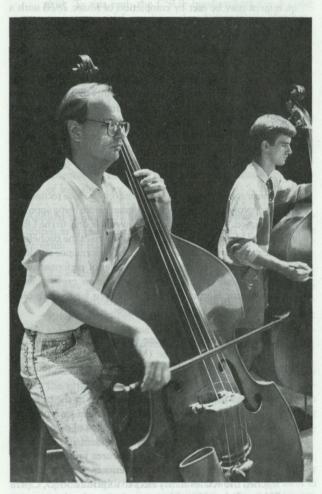
#### 449I Internship in Secondary Teaching (10)

For candidates who have declared for the Ryan Act credential. See description and prerequisites under Division of Teacher Education. Concurrent enrollment in Art Education 449S required. Offered every spring semester.

# 449S Seminar in Secondary Teaching (2)

Seminar for student teachers in art. The practical aspects of art instruction in secondary schools. Concurrent enrollment in Art Education 4491 required. Offered every spring semester.

# Department of Music



Department Chair: Benton Minor Vice Chair: Gordon Paine Department Office: Performing Arts 262

### Programs Offered and land of man and at a moltavabe Bachelor of Arts in Music

composers and theorists reach courses in the Liberal Arts Music Education Music Education
Music History and Theory

Bachelor of Music

Commercial Music about the state of Sta Versity accreditation by the Western Association ordinary Instrumental and a graduation, a music major must may gift Keyboard was all music coursework than is to be used to meet Voice regumments. In addition a suclearized at deinnebar? Accompanying

# Minor in Music

# Master of Arts in Music

Music History and Literature Music Education attempting supplements and manufactured and T

# Master of Music Walter Real light State of Music

Performance
Theory-Composition

Single Subject (Secondary) Credential

# Faculty represents, a student will pursue a concentration of the

Martha Baker, Marc Dickey, Mitchell Fennell, Mark Goodrich, David Grimes, Su Harmon, Carole Harrison, Burton Karson, Leo Kreter, Gary Maas, Todd Miller, Benton Minor, Gordon Paine, Lloyd Rodgers, Ernest Salem, Preston Stedman, Robert Stewart, Laurance Timm, Rodger Vaughan, Robert Watson, Vance Wolverton

#### INTRODUCTION

Music is one of the most rewarding of all human endeavors, and the faculty and students in the Department of Music share a deep love for their art and a common desire to achieve excellence in it. The department offers a wide spectrum of degree programs and options with an overall emphasis in the area of performance. The curriculum provides basic preparation for careers in music or further graduate study, and is designed to provide a balanced education in the many facets of musical experience. Artist-teachers offer instruction in all areas of performance, while practicing composers and theorists teach courses in theory, and active musicologists provide instruction in history and literature. It is the goal of the department to develop each student's musical and intellectual potential to the highest level of individual capability. The Department of Music is fully accredited by the National Association of Schools of Music, in addition to the overall university accreditation by the Western Association of Schools and Colleges.

#### Credential Information

The Department of Music offers course work leading to a CSUF Waiver Program in Music for the Ryan Single Subject Teaching Credential. For details, contact the Admission to Teacher Education Office and the coordinator of music education.

The Department of Music offers supplementary authorizations for the Ryan Single Subject Teaching Credential in Instrumental Music and in Vocal Music. A supplementary authorization in music is offered for the Ryan Multiple Subject Teaching Credential. For details contact the Office of Admission to Teacher Education.

#### Advisement

All music majors are required to obtain advisement each semester. Area coordinators serve as advisers, and students are assigned according to their area of concentration.

#### Requirements of the Music Department

- All entering music majors are enrolled in the Bachelor of Arts degree program for at least the first semester of residence. Students may request a change in their degree objective to the Bachelor of Music upon completion of at least one semester of course work at the university, successful completion of a jury examination, and recommendation of the faculty in the appropriate area of concentration. Enrollment in the Bachelor of Music program is limited.
- Upon entering the university as a new music major or upon officially changing to a major in music, each student will present an audition in the appropriate principal performance area (instrument or voice) and a placement audition for class piano.
- 3. All students must pass proficiency examinations in traditional harmony (sight-singing, dictation, keyboard, and paperwork) and piano before being approved for graduation. Transfer students will fulfill the theory requirement by passing the en-

- trance examination in theory; first-time students and transfers with insufficient preparation at entrance will normally take the examination in Music 211. The piano-proficiency requirement may be met by completion of Music 282B with a passing grade. Students whose principal performance area is piano satisfy the piano proficiency requirement upon reaching 300 level in performance.
- 4. Each music major must declare a single principal performance area, which must be approved by the faculty of that area upon completion of the entrance audition. In order to be approved for graduation, each student must achieve at least the 300 level of proficiency in the principal performance area. B.A. Liberal Arts-option students who elect project alternative 2 (Music 497: Project) need reach only the 200 level.
- 5. Each music major is required to present one or more recitals or a project appropriate to the degree program before being approved for graduation. The project option is available only in the Liberal Arts and Music History and Theory options of the Bachelor of Arts degree. Recitals at the 300 level of performance are designated Music 398; recitals at the 400 level of performance are designated Music 498. See the sections below on the Liberal Arts and Music History and Theory options for recital/project information applicable to those degrees.
- 6. Undergraduate music majors are required to participate in a major performance ensemble (Music 361) and complete it with a passing grade each semester of residence as follows:
  - a. Students who declare wind or percussion as the principal performance area must register for band; students who declare a string instrument as the principal performance area must register for orchestra; students who declare voice as the principal performance area must register for chorus. (Bachelor of Music students in voice who have reached the 400 level may elect to substitute 361D, Opera Theatre.) A student whose principal performance area is keyboard or classical guitar must register for one of the above major performance ensembles, according to the student's qualifications and subject to audition.
  - b. A music major admitted into the Bachelor of Music program, whose senior recital instrument is keyboard or classical guitar and who has participated in a major performance ensemble for at least five semesters (a minimum of two semesters at California State University Fullerton), may thereafter substitute chamber music and/or small performance ensembles (Mu 362, 363, 386) to satisfy the departmental major performance ensemble (Mu 361) requirement.
- c. The educational purpose of the requirement that all music majors participate in an appropriate major performance ensemble during each semester of residence is to

permit each student to experience the highest level of ensemble music-making commensurate with the student's skill. To this end, the CSUF band/orchestra and choir programs are of the traditional graded structure. University Singers (361E), Wind Ensemble (361F) and Symphony Orchestra (361A) are for the more advanced students; University Choir (361B), Symphonic Band (361C) and Women's Choir (361W) are for students of less skill or experience. Placement in bands, orchestra and choirs will be based on student ability as determined by the directors of those ensembles. Music majors will be assigned to the ensemble for which they are best qualified. A student does not have the option of satisfying the requirements for participation in a major performance ensemble by enrolling in an ensemble intended for those of less ability or experience.

- 7. Applied-music study in the principal performance area is required as stipulated under the requirements for each degree program. The following conditions apply:
  - If a student pursuing the Bachelor of Arts degree (Music History and Theory) or the Bachelor of Music degree (Composition) reaches the 300 level in the principal performance area before the required units in applied music are completed, Music Department electives may be substituted for the remaining applied music units.
  - In addition to the four units of applied music required in the principal performance area, Bachelor of Music students in the Composition option must complete six units of applied composition (including the 498 recital) after taking Music 422. The 498 recital will consist of a presentation of the student's own compositions.
- c. Students pursuing the Bachelor of Music degree in any option except composition must achieve the 300 level in performance before giving the 398 recital and 400 level in performance before giving the 498 recital. Specific information on jury-level criteria is available from the Music Department office. The landwill and not record
  - d. In order to qualify for state-funded applied music, an undergraduate student (with the exception of a student who is within six units of completing all degree requirements) must be currently enrolled for a minimum of six units of music classes (including applied music), at least two units of which must be in an academic area of music (any course other than performing ensembles and applied music). In addition, the student must earn a passing grade in all music courses, be making satisfactory progress toward a degree, and be currently enrolled in the appropriate major performance ensemble, as stipulated in section 6 above. If the student fails to complete with a passing grade either the required six units of music classes or the major performance ensemble, applied lessons will be

- withheld in the subsequent semester. Students are eligible for a maximum of three semesters of lessons at a given level of performance.
- Students in the B.A. program are eligible for a maximum of eight units of applied music (398 and 497 included). B.M. students are eligible for a maximum of 14 units (398 and 498 included.)
- 8. Senior transfer students or graduate students in music entering to satisfy the legal waiver for teaching credentials, are expected to complete a minimum of one semester of upperdivision course work in music with a GPA of at least 3.0 before they may be approved for admittance to teacher education. Required courses and competencies must be satisfied before the faculty committee will consider endorsing the student's acceptance into the credential program.
- 9. To be approved for graduation, a music major must maintain a 2.5 GPA in all music coursework that is to be used to meet degree requirements. In addition a student must earn a grade of C or better in all music courses required for the Bachelor of Arts in Music or Bachelor of Music degree.
- 10. All requests for exceptions to departmental or curricular requirements must be directed by petition to the department chair.

#### MUSIC DEGREE PROGRAMS

The Department of Music offers a variety of courses that lead to baccalaureate and graduate degrees in teaching and the professions. The baccalaureate degree may be earned in either of two degree programs (Bachelor of Arts and Bachelor of Music). Within these programs, a student will pursue a concentration in liberal arts, music history and theory, music education, performance, composition or accompanying.

#### BACHELOR OF ARTS IN MUSIC

The Bachelor of Arts in Music shall consist of no fewer than 50 units of music, of which at least 29 shall be upper division (300 level and above). All Bachelor of Arts students must complete the basic requirements listed immediately below and must select and complete the requirements listed in one of three concentrations: Liberal Arts, Music History and Theory or Music Education.

#### Core Requirements

case of both alternatives, the recital or projects with be
Music theory (Music 111A,B; 211; 319; 320A
or B)
Music history and literature (Music 251;
351A,B,C)
Principal performance area (Applied Music) 4
Major performance ensemble*
(Music 361A,B,C,E,F,W)4
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<sup>\*</sup>Required for all music majors every semester of residence (see "Introduction," item

#### Liberal Arts Concentration

This concentration allows a student to take an academic major in music without being involved in a program of professional preparation. The degree emphasis is historically the oldest such study plan in music in higher education and represents a liberal-arts response to the highly professional program of the Bachelor of Music degree.

Units
Core requirements for BA degree
Music theory (Music 316 or 318, 323 or 422) 4
Conducting (Music 382A or 383A)
Senior project (Music 398 or 497)
Music literature (Music 453A through 459A) 2
Electives (minimum of 6 upper division; no more than 2
units of Music 193-493) 7
Total

#### Senior Project

Two alternatives are available to the student, each with a different focus and prerequisite:

Alternative 1 (Music 398: Recital): Prerequisite is achievement of 300 applied music level in the area of principal performance one semester before the semester in which the student plans to present the recital. The student will present a brief recital in a regular recital time or in the appropriate workshop (at faculty discretion).

Alternative 2 (Music 497: Project): Prerequisite is achievement of 200 applied music level *two* semesters before the semester in which the student plans to present the project. The student will prepare a special project in the senior year which will culminate in a lecture, lecture-recital or other form of public presentation. To the greatest extent possible, this project should be an independent investigation into an area of special interest and should involve minimal faculty guidance. The public presentation will be evaluated by a faculty committee, as is the case with senior recitals, and must be approved by that committee prior to graduation.

In the case of both alternatives, the recital or project will be included when calculating the student's quota of state-funded private lessons.

#### Music History and Theory Concentration

This concentration is designed as a balanced program in music history and theory and provides suitable preparation for advanced degrees in theory, literature, or musicology. It also provides basic preparation for advanced study in other fields, such as musical acoustics, music therapy, ethnomusicology, library science in music, and music in industry and recreation.

Students seeking the concentration in Music History and Theory must submit a paper to the music history or theory coordinator not later than the beginning of their junior year. Acceptance into the degree program is contingent on the submission of a satisfactory paper.

Allied requirements for the Music History and Theory concentration:

- 1. Twenty units in a secondary academic area (not music, but related to the student's project or useful to prepare the student for future graduate work in music). The choice of a secondary academic area must be approved in writing by the coordinators of music history and theory. Suggested areas: art, English, theatre, history, physics (acoustics), anthropology, languages or computer science.
- 2. Foreign language proficiency, preferably German, to be satisfied by one of the following:
  - a. Four years of study at the secondary school level,
  - Passing an examination given by the Department of Foreign Languages and Literatures, or
  - c. Completing with a passing grade the second semester of the beginning university sequence of a foreign language.

which also believe qualified and not belieff. Units
Core requirements for the Bachelor of Arts 34
Music theory (Music 316, 419) 5
Conducting or composition (Music 382A or 383A or 422)
422)
Music history or theory project (Music 497)
Electives in music
70 Total

#### Music Education Concentration

Piano Pedagogy Emphasis:

The emphasis in piano pedagogy is designed to provide in-depth preparation for individual and group piano instruction and will not lead to teaching in the California public schools.

Units windergraduate an deat twith the exception of a student
Core requirements for Bachelor of Arts
Keyboard Ensemble (363K) 1
Applied Piano (393)
Conducting (382A or 383A) 2
Recital (398) 1
Piano Literature and Interpretation (454A, B) 4
Piano Pedagogy (467A,B,C)*
Elective
Total

<sup>\*</sup>Co-enrollment in Music 466 strongly advised.

Instrumental.	Vocal-Choral,	General	Music	Emphases:

The emphases in instrumental, vocal-choral and general music are designed to provide in-depth preparation for teaching in the California public schools under the provisions of the Teacher Preparation and Licensing Law of 1970 (Ryan Act).

can Completing the second semester of the beginning university
Instrumental Emphasis: Segment asigned a logorous Units
Instrumental Emphasis:  Core requirements for the Bachelor of Arts Orchestral instruments (Music 281B,P,S,W 4 Music theory (Music 323)
Total
Vocal-Choral Emphasis: (Control of State of Stat
Vocal-Choral Emphasis: Units
Core requirement for the Bachelor of Arts       34         Orchestral Instruments (Music 281B,P,S,W)       4         Conducting (Music 383A,B)       4         Literature and Pedagogy (Music 453A or B and 468A)       4         Chamber Music (Music 363)       2         Recital (Music 398)       1         Electives       1         Total       50
General Music Emphasis: Units
Core requirements for Bachelor of Arts 34 Orchestral Instruments (Music 281B,P,S,W) 4 Conducting (Music 383A,B) 4 Music and Child Development (Music 333) 3 Public School Choral Materials (Music 354) 2 Vocal Chamber Music (Music 363V) 1 Recital (Music 398) 1 Electives in music 1
Some is consequently with fails to move satisfactorily the
Credential Information
Students desiring a California teaching credential in music must complete the following courses prior to enrolling in the professional education program as required by the Department of Secondary Education.
Instrumental Emphasis: Units
Music Education 295 (1), 394A,B (2,2) 395A (1); Music 283 (1), 353 (2), 383A (2), 444 (2)
Choral-Vocal Emphasis:
Music Education 295 (1), 394B (2), 395B (1), 404 (3); Music 290 (1), 354 (2), 382A (2)

General	Music	Emphasis:		

Music Education	295 (1), 394B	(2), 395B	(1),	404 (3);	
Music 290 (1),	468A (2)	Jardania, r		V.17719V7.7	10

Students who wish to earn a single subject credential in Music in addition to a Bachelor of Arts with a Music Education concentration must complete the following:

Oloug. Music 450, squalles the entrance exastern in 25 Units	
Music Education 442 (3) Music Education 449E (3) and professional education courses Secondary Education 440F	
and 440S	
Music Education 449I (Student teaching) and Music Educa-	
tion 449S	
Total	

Prior to admission to teacher education, the student must reach 300 level in the principal performance area and pass functional examinations in keyboard and voice. The functional examination requirements may also be met by completing Music 282B (piano) and Music 283B (voice) with minimum grade of B.

#### BACHELOR OF MUSIC

This degree program is designed to provide training for highly gifted students who show promise and capability of becoming professional performers and composers.

The degree consists of 132 semester units. A minimum of 70 semester units in music are required, at least 32 of which must be upper division.

#### Core Requirements for the Bachelor of Music

Music Theory (Music 111A, B; 211; 319; 320A

or 320B*)
Music History and Literature (Music 251; 351A,B,C) 12
Principal Performance Area (Applied Music) 6
Major Performance Ensemble (Music 361)*
Recital (Music 498)
local
Composition Concentration Concentration Units
Core requirements for the Bachelor of Music 37
Core requirements for the bachelor of Music
Music theory (Music 316; 318; 320A or B†; 323; 419;
Music theory (Music 316; 318; 320A or B†; 323; 419; 422)
Music theory (Music 316; 318; 320A or B†; 323; 419; 422)
Music theory (Music 316; 318; 320A or B†; 323; 419; 422)

<sup>\*</sup>Required of all music majors every semester of residence (see "Introduction," item

Units

<sup>†</sup>Music 320A and 320B required in Concentration in Composition

Instrumental Concentration	a. Four years' study of foreign language at the secondary school
Orchestral Instruments Emphasis: Units	level, or
Core requirements for the Bachelor of Music 37	
Music theory (Music 316, 323, 422)	b. Passing an examination given by the Department of Foreign
Principal performance area (Applied Music) 6	Languages and Literatures, or
Recital (Music 398)	
Conducting (Music 382A,B)	c. Completing the second semester of the beginning university
Chamber music (Music 362 and 363) 6	sequence of a foreign language.
Electives in music	Core requirements for the Suche (and Architecture) 34
	Accompanying Concentration Units
Total	
Classical Guitar Emphasis: Units	Core requirements for the Bachelor of Music
	Music theory (Music 316, 318, 422)
Core requirements for the Bachelor of Music 37	Music literature (Music 457A)
Music theory (Music 316, 323, 422) 6	Principal performance area (Applied Music)
Principal performance area (Applied Music) 6	Chamber music (Music 363)
Recital (Music 398)	Harpsichord class (Music 372) 1
Conducting (Music 382A) 2	Organ class (Music 373)
Chamber music (Music 363G) 6	Functional Skills (Music 385)
Fingerboard skills (Music 385G)	Accompanying (Music 386)
Guitar history and literature (Music 459A) 2	Conducting (Music 383A) 2
Guitar pedagogy (Music 459B)	Diction (Music 380A, B,C)3
Electives in music	Recitals (Music 398, 498*)
Total 70	Electives in music 5
BYCHELOR OLYOPHO	Total
Keyboard Concentration Units	Recual Chush 1981
Core requirements for the Bachelor of Music 37	Electives
Music theory (Music 316, 320A or B, 422) 4	*A total of two 498 recitals is required. The other is listed under "Core Requirements."
Music literature (Music 454A,B)	ments.
Conducting (Music 382A or 383A)	Commercial Music Concentration:
Recital (Music 398)	Commercial Music Concentration: Instrumental Emphasis  Units
Principal performance area (Applied Music) 6	Core requirements for the Bachelor of Music 37
Chamber music (Music 362 or 363)	Music Theory (Music 312A,B)
Accompanying (Music 386)	History of American Commercial Music (Music 356) 3
Pedagogy (Music 467A,B,C)	Principal Performance Area (Applied Music)
Harpsichord or Organ class (Music 372 or 373)	Improvisation (Music 265A,B,C)
Electives in music	Major Performance Ensemble (Music 361)
	Recital (398)
Total	Lab Band or Stage Band (Music 362L or 362S)
Voice Concentration Units	
Core requirements for the Bachelor of Music	Electives in Music 8
	Total
Music theory (Music 316, 422)	Credential Information
Music literature (Music 456; 457A,B)	Commercial Music Concentration:
Recital (Music 398)	Composition-Arranging Emphasis Units
Principal performance area (Applied Music)	Core requirements for the Bachelor of Music
Opera Theatre (Music 361D)	Music Theory (Music 312A,B; Music 314A,B;
Diction (Music 380A,B,C)	Music 323)
Conducting (Music 383A) 2	History of American Commercial Music (Music 356) 3
Pedagogy (Music 468A,B) 4	Applied Composition/Arranging
Electives in music 4	Improvisation (Music 265A)
Total 70	Major Performance Ensemble (Music 361)
Alliad and insurant for all	Lab Band or Stage Band (Music 362L or 362S)
Allied requirement for voice concentration:	Recital (Music 398)
Proficiency in two foreign languages (to be chosen from French,	
German, and Italian), each to be satisfied by one of the follow-	Electives in Music
ing: nonaction of median of the control of the second	Total

#### MINOR IN MUSIC

The minor in music may be used by persons whose majors are in other fields. A maximum of 14 lower-division units may be included in work counted toward the music minor. The minor requires a minimum preparation of 20 units as follows:

7	Inits
Theory of music (selected from Music 101; 111A,B; 211; or any 300- or 400-level theory classes for which the student is qualified)	6
Music history and literature (Music 100; 251; 350 or 351A,B,C; or courses at the 400- or 500- level for which	
the student is qualified)	5-6
Applied techniques (selected from Music 183, 184A,B;	
281B,P,S,W; 283A,B or any course in ensemble, conducting, piano, voice or orchestral instruments at the	
300- or 400-level for which the student is qualified)	8-9
more and Total more and account of the more	. 20

#### MASTER OF MUSIC AND MASTER OF ARTS IN MUSIC

Two graduate degrees in music are offered in the Department of Music: the Master of Music and the Master of Arts. Each degree seeks to serve a special group of graduate students. For those who intend to pursue advanced degrees beyond the master's level, the Master of Music normally leads to the D.M.A. degree, and the Master of Arts to the Ph.D. or the Ed.D.

#### Admission to Graduate Standing: Conditionally Classified

All applicants admitted into the music program enter in conditionally classified graduate standing. University requirements include: a baccalaureate from an accredited institution; a gradepoint average of at least 2.5 in the last 60 semester units attempted; and good standing at the last college attended and for foreign students, a minimum TOEFL score of 560. Each applicant must also present a satisfactory audition, submit an acceptable written essay in the area of specialization, and pass entrance exams in music theory, music history and writing. A student whose audition is unsatisfactory or who fails to meet satisfactorily the entrance exam requirements shall be removed from "conditionally classified" status.

#### Graduate Standing: Classified

A graduate student may apply for classified graduate standing upon attainment of the following prerequisites: (a) completion of all requirements for conditionally classified standing as described above; (b) a major in music (or the equivalent of a major; i.e., 29 upper-division units in music) with a minimum grade-point average of 3.0 in the major; and (c) satisfactory completion of Music 500, Introduction to Graduate Study in Music. One objective of Music 500 is the preparation of a study plan listing all courses required for completion of the degree. This study plan must receive the approval of the coordinator of the student's area of specialization, the Music Department graduate program adviser

and the dean of graduate studies. Opportunity is given the student to remove any deficiencies in undergraduate-level preparation. Courses taken to satisfy deficiencies usually will not be included on the student's study plan and thus will not count toward the master's degree.

Students who do not pass one or more of the entrance examinations shall take and complete specified coursework with a grade of A or B. Music 450 satisfies the entrance examination requirement in music history, and Music 411 meets the requirement in music theory. Students may elect to bypass the history and theory entrance exams and take the appropriate class(es) instead. Those who do not meet required writing proficiency at entrance shall take Music 451 or another appropriate course specified by the Music Department. The writing proficiency requirement must be met before a student may take Music 500, and the music history requirement must be satisfied before a student may take any 500level music history seminar, ottosles anobute moitanimase evis

#### MASTER OF MUSIC

The Master of Music provides an avenue of graduate study for the highly creative composer or for the superior performer in a program tailored to each student's demonstrated talent and to each student's professional development. Applicants must have completed either a Bachelor of Music degree in performance or composition or show evidence of equivalent rigorous training. For the entrance audition, applicants in performance must demonstrate proficiency equivalent to the 400 level, the level expected of a performance major in the Bachelor of Music program at the time of the senior recital, while composition applicants must submit a portfolio of scores for examination by the composition faculty. For admission to the programs in choral or instrumental conducting, applicants must show evidence of substantial conducting course work at the undergraduate level plus practical experience. Further, to audition for entrance into the program, each choral applicant must demonstrate conducting proficiency with a mixed chorus and each instrumental applicant must demonstrate conducting proficiency with a band or orchestra. Under exceptional circumstances, a tape may be substituted for the live audition.

#### Study Plan

The Master of Music degree program requires a minimum of 30 units of graduate study in music, at least half of which must be in 500-level courses. Music 500, Introduction to Graduate Study in Music, must be taken within the first nine units. At least one recital is required, in addition to a corollary written essay. Under certain circumstances, and with departmental approval, a thesis may be substituted for the recital and written project: landland

#### MASTER OF ARTS IN MUSIC Date MA to main based 6 ht

Two options are offered in this degree program: Option I in music history and literature, and Option II in music education. Both options provide for breadth of advanced study as well as an area of specialization. The degree is for teachers and supervisors of music and for college teaching careers in music history or music education. For the entrance audition in *history and literature*, applicants must submit an example of a previously written research paper on a musical subject, while applicants to the program in *music education* must submit a 30-minute tape demonstrating their teaching technique in a classroom situation.

#### Study Plan

The Master of Arts degree program requires a minimum of 30 units of graduate study, no more than nine of which may be outside the field of music and at least half of which must be in 500-level courses in the major.

Option I in history and literature requires reading ability in a foreign language, preferably German or French, prior to advancement to candidacy, a thesis, and at least six units of study in a non-music field supportive of the major. Students in Option II, music education, shall complete a thesis, project, or comprehensive examination. Students selecting the comprehensive examination (0 units) shall complete three additional units in the concentration. Eight semester units are common to both options (Music 500, 3 units; Music 361-363, 2 units; and Music 552-555, 3 units). Music 500, Introduction to Graduate Study in Music, must be included within the first nine units taken as a graduate student under both options.

For further details or advisement, consult the Department of Music,

# Music Courses

### 100 Introduction to Music (3)

Musical enjoyment and understanding through a general survey of musical literature representative of a variety of styles and performance media. Music will be related to other arts through lectures, recordings and concerts. For non-music majors.

#### 101 Music Theory for Non-Music Majors (3)

Basic theory and practical applications to improve music performance and listening skills. Includes sightsinging and relationship to keyboard and simple melodic instruments. For non-music majors.

#### 103 History of Rock (3)

Rock music around the world; its origins and the development of national styles. Emphasis on listening. For non-music majors.

#### 110 Foundation of Music (3)

Prerequisite: ability to read music. Intensive study of the elements of music: notation, rhythm, meter, melody, scales, key signatures, intervals, and chord structure. Exercises in writing music, technical analysis, and ear training. Open to all qualified students, though directed toward the music major or minor.

#### 111A,B Diatonic Harmony (2,2)

Includes scales and intervals, triads and their inversions, harmonizations, non-harmonic tones, modulation and seventh chords. Co-enrollment in the corresponding section of Music 111AL or 111BL is required for music majors and is recommended for others.

#### 111AL, 111BL Diatonic Harmony Laboratory (1,1)

Application of materials in Music 111A and 111B. Activity to include sightsinging, dictation and keyboard exercises. (2 hours activity)

#### 182 Piano Class for Music Majors (2)

Keyboard skills for students whose major performance instrument is not piano. (3 hours activity)

# 183 Voice Class for Non-Music Majors (1)

Beginning and elementary techniques in singing for the non-music major. May be repeated for credit. (2 hours activity)

# 184A Piano Class for Non-Music Majors (1)

Beginning and elementary piano skills for the non-music major. (2 hours activity)

# 184B Piano Class for Non-Music Majors (1)

Prerequisite: Music 184A or consent of instructor. Continuation of 184A.

#### 185A Guitar Class for Non-Music Majors (1)

Beginning and elementary classical guitar techniques for the non-music major. May be repeated for credit. (2 hours activity)

#### 185B Guitar Class for Non-Music Majors (1)

Prerequisite: Music 185A or consent of the instructor. Elementary classical guitar techniques for the non-music major. Continuation of Music 185A. May be repeated for credit. (2 hours activity)

### 193, 293, 393, 493 Individual Instruction (1-2)

Prerequisite: jury recommendation. Individual study with approved instructor. Emphasis on technique and repertoire. Music majors must register for a minimum of one unit per semester. Performance majors approved by jury recommendation should register for two units per semester. Jury examination required. Instructional fee required. May be repeated for credit.

#### 196 Student-to-Student Tutorials (1-3)

Prerequisites: a 3.0 or higher grade-point average and/or consent of instructor and simultaneous enrollment in the course or previous enrollment in a similar course or its equivalent. Consult "University Curricula" in this catalog for more complete course description.

#### 211 Chromatic Harmony (2)

Prerequisite: Music 111B. Continuation of Music 111A, B. The chromatic practice of the 19th century. Secondary dominants; ninth, eleventh and thirteenth chords; sequence; Neapolitan and augmented sixth chords. Co-enrollment in Music 211L is required for music majors and is recommended for others.

#### 211L Chromatic Harmony Laboratory (1)

Application of materials in Music 211. Activity to include sightsinging, dictation and keyboard exercises. (2 hours activity)

#### 251 Survey of Musical Literature (3)

Prerequisite: consent of instructor. Literature of music in Western civilization. Students should be able to read music in order to analyze form and style. (3 hours lecture)

#### 265A Jazz Improvisation I (1)

Prerequisite: Music 111A, B, ability on a standard jazz instrument or consent of instructor. Application of scales and their relationship to chords. Includes modes, jazz rhythmic phrasing, blues progressions, and cycle of dominant seventh chords. Basic jazz keyboard drills and ear training involved.

#### 265B Jazz Improvisation II (1)

Prerequisites: Music 265A and 211, or consent of instructor. Continuation of modal patterns and jazz rhythms for improvisation. Explores melodic construction in improvisation. Emphasis on playing II-V-I progressions in major and minor keys. Includes jazz keyboard drills and ear training.

### 265C Jazz Improvisation III (1)

Prerequisite: Jazz Improvisation I and II or consent of instructor. Continuation of Jazz improvisational pedagogy and techniques with an emphasis on performance application. Includes form and stylistic analysis, and ear training.

#### 281B,P,S,W Orchestral Instruments (1,1,1,1)

Techniques and materials for teaching orchestral instruments. Required for music education emphasis. May be repeated for credit. Instructional fee. (3 hours activity)

281B Brass Instruments (1)

281P Percussion Instruments (1) 10000 1 100000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 100000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 100000 1 100000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10000 1 10

281S String Instruments (1) has maked in bland and and any

281W Woodwind Instruments (1)

#### 282A,B Piano Class for Music Majors (2,2)

Keyboard skills for students whose major performance field is not piano. A — Prerequisite: Music 182 or placement by instructor. B — Prerequisite: Music 282A or placement by instructor. Meets minimum piano proficiency requirements for degree. (3 hours activity)

### 283A,B Voice Class for Instrumentalists (1,1)

A — Prerequisite: teaching credential candidate or consent of instructor. Vocal skills for students whose major performance field is not voice. Prepares music education students to work with young singers in group settings by understanding their own vocal problems and the solutions in a variety of vocal styles. B — Prerequisite: Music 283A. Continuation of Music 283A at more advanced level. Completion of Music 283B satisfies voice proficiency requirement for music credential candidates.

#### 290 English Diction (1)

Prerequisite: Sophomore standing or consent of instructor. Standard English for singers. Examples from American and British vocal literature explained through the use of the International Phonetic Alphabet. Individual performance of examples plus assigned repertoire.

#### 301 Techniques of Song Writing (3)

Prerequisites: Music 101 or consent of instructor. Melody writing and setting of text to music. Includes consideration of melodic construction, harmonic progression, and metrical values of text. For non-music majors.

#### 302 History of Jazz (3)

Prerequisite: Music 100 or 101 or consent of instructor. Historical study of jazz music in America; chronological development and stylistic evolution with consideration of peripheral trends. Emphasis on listening. Intended primarily for non-music majors; may be used as a music major elective.

### 303 Ethnic Music (3)

Prerequisite: Music 100 or consent of instructor. Survey of music from Europe, Asia, Africa, Australia, Oceania, the Caribbean and indigenous Indian music from North and South America. Emphasis on musical styles and forms, and religious and ritualistic functions of music in various cultural frameworks. Intended primarily for non-music majors; may be used as a music major elective.

#### 304 Music of Mexico (3)

Survey of the art, folk and traditional music of Mexico from pre-Cortesian aboriginal music to 20th-century style, including neo-Hispanic, folk (corrico, etc.), mestizo, mariachi, nationalistic, jazz, and modern art music. Interrelationship between traditional (folk) and serious (art) music; effects of Mexico's history on its music. No credit toward the music major.

#### 305 Women in Music (3)

Prerequisite: Music 100 or consent of instructor. A study of the contributions women have made as composers and performers as well as the historical limitations to which women musicians have been subject. Recitals by guest lecturers and presentation of a culminating study on selected topics by students. No credit toward the music major.

#### 306 Business of Music (3)

Prerequisites: Music 100 or consent of instructor. This course is designed as a comprehensive survey of the business aspects of songwriting, publishing, copyright, legal affairs, the record industry, music in broadcast and film, and career planning and development. Intended primarily for non-music majors; may be used as a music major elective.

#### 312 Commercial Arranging (2)

Prerequisite: Music 211. Harmonic practices in commercial music; stage band and jazz writing techniques. (May be repeated once for credit.)

#### 314A Special Projects in Commercial Music (2)

Prerequisite: Music 312B or consent of instructor. Three- and four-part voice accompaniment; planning and executing the multi-chorus small group arrangement.

#### 314B Special Projects in Commercial Music (2)

Prerequisite: Music 314A or consent of instructor. Introduction to harmonic substitutions; planning and executing arrangements for larger groups of instruments.

#### 316 16th-Century Counterpoint (2)

Prerequisite: Music 211 or consent of instructor. Sixteenth-century counterpoint in two, three and four parts, covering motet, canon, double counterpoint.

#### 318 18th-Century Counterpoint (2)

Prerequisite: Music 316 or consent of instructor. Eighteenth-century counterpoint in two, three, and four parts, covering invention, canon, double and triple counterpoint, and fugue.

#### 319 Form and Analysis (3) (Formerly 319A)

Prerequisite: Music 211 or consent of instructor. Analysis of structural elements of music such as motive phrase and period: binary, tenary, rondo, sonato allegro, and larger musical forms in representative musical works.

#### 320A,B 20th-Century Techniques (2,2)

Prerequisite: Music 211. Compositional practices of the 20th century; emphasis on written examples in the various styles, includes sightsinging, keyboard practice and dictation. A — Compositional techniques from 1890 to 1945. B — Compositional techniques since 1945, to include the synthesis of sound. (1 hour lecture, 2 hours activity)

#### 323 Orchestration (2)

Prerequisite: Music 319, 320 or consent of instructor. Writing and analysis of orchestral music.

#### 324 Scoring for the Band (2)

Prerequisite: Music 323 or consent of instructor. Devices, techniques, and skills required to produce complete transcriptions for the contemporary public school wind band.

#### 326 Introduction to Midi (2)

Prerequisite: Music 211. Introduction to the theory and use of Midi instruments, including synthesizers, sequencers, computer software, drum machines, and effects units. Demonstrations and assignments dealing with techniques of creating music for live performance recording and film scoring.

#### 327 Application of Midi (1)

Prerequisite: Music 326. Continuing supervised laboratory experimentation with equipment, concepts, and techniques encountered in Music 326. Students pursue individual assignments based on experience, ability, and interest. Topics are unique to each student. They may range from the production of original compositions to reorchestrating a symphonic movement of Midi instruments. May be repeated for credit.

# 333 Music and Child Development (3)

Prerequisite: Music 101 or equivalent; junior or senior standing. The relationship of music to child growth and development for the child from 5 to 12. Survey of age-appropriate music materials.

### 350 Music in Our Society (3)

Prerequisite: Music 100 or consent of instructor. Music in its relationship to general culture. A sociological approach: musical criticism and journalism, concert life, audience psychology, and the political/religious/business aspects of the American musical scene. No credit toward the music major.

# 351A History and Literature of Music (3)

Prerequisite: Music 211 and 251 or consent of instructor. A study of the history and literature of music from early Greek beginnings through the Renaissance area.

### 351B History and Literature of Music (3)

Prerequisite: Music 351A. A study of the history and literature of music of the Baroque and Classic eras. A grade of "C" or higher fulfills the course requirement of the university upper division baccalaureate writing requirement for music majors.

#### 351C History and Literature of Music (3)

Prerequisite: Music 351B. A study of the history and literature of music from the Romantic era to the present.

#### 352 Symphonic Music in Western and Eastern Cultures (3)

Prerequisite: Music 100 or 101 or consent of instructor. Survey of symphonic music in Western and Eastern cultures from Baroque through Modern periods. Intended primarily for non-music majors; may be used as a music major elective.

#### 353 Public-School Instrumental-Music Materials (2)

Prerequisite: Music 382A or concurrent enrollment. The study of instrumental-music materials, repertoire, programming, and curriculum for public-school instrumental-music ensembles. Topics will include solo, chamber, and large-ensemble repertoire.

#### 354 Survey of Public School Choral Music Materials (2)

Prerequisite: Music 383A. Examination and analysis of choral repertoire suitable for junior and senior high choruses.

#### 355 Film Music (3)

Prerequisites: Music 100 and an ability to read music or Music 101. An historical survey of motion picture musical scores. Analysis, listening and examination of motion picture scores. Intended primarily for non-music majors; may be used as a music major elective.

#### 361A-W Major Performance Ensemble (1)

Study and performance of standard and contemporary music literature. Public concerts on campus and in the community each semester. A concert tour may be included by some groups. Required of music majors every semester of residence. (More than 3 hours major production) May be repeated for credit.

#### 361A Symphony Orchestra (1)

Prerequisite: audition or consent of instructor. Instructional fee.

#### 361B University Choir (1)

Prerequisite: consent of instructor.
361C Symphonic Band (1)

Prerequisite: consent of instructor. Instructional fee.

# 361D Opera Theatre (1)

Roles and representative excerpts from standard and contemporary operas and the musical, dramatic and language techniques of the musical theatre. Performance of operatic excerpts and complete operas. Also open to non-vocal majors.

#### 361E University Singers (1)

Prerequisite: advanced voice students or those accepted by

#### 361F University Wind Ensemble (1)

Prerequisite: advanced wind and percussion students accepted by audition. Instructional fee. Janua January 154

### 361W Women's Choir (1) 101 104 AOSE SHOWN SESTIMENTS

Prerequisite: consent of instructor. Performance of choral in electronic music composition. May be repeated to subtratil

#### 362B Varsity Band (1)

Prerequisite: consent of instructor. The Varsity Band provides music for Titan football and basketball games, and other related activities. May be repeated for credit. Instructional fee.

#### 362D Percussion Ensemble (1)

Prerequisite: consent of instructor. Study and performance of music written for the percussion ensemble. May be repeated for credit. (2 hours activity)

#### 362E Brass Ensemble (1)

Prerequisite: consent of instructor. Study and performance of music written for large brass choir/ensemble. May be repeated for credit. Instructional fee. (2 hours activity)

# 362L Jazz Ensemble I (1)

Open by audition and consent of instructor. Numerous public performances on campus and in the community. Open to nonmusic majors. May be repeated for credit. Instructional fee.

# 362M Horn Ensemble (1) and A stant A got and O mgg O sys

Prerequisite: consent of instructor. Study and performance of music written for French horn ensemble with emphasis on the solution of various problems relating to multiple horn literature.

#### 362S Jazz Ensemble II (1)

Prerequisite: Open by audition and consent of instructor. (For those who do not qualify by audition for 362L.) Jazz and jazz-rock ensemble; public performance each semester. Open to non-music majors by audition. May be repeated for credit. Instructional fee.

#### 362X Beginning Opera Techniques (1)

Prerequisite: recommendation of voice faculty. Arias for the beginning opera student, and fundamentals of stage movement. May be repeated for credit. May be repeated for credit.

### 363B-X Chamber Music Ensembles (1)

Open to all qualified wind, string or keyboard students. Ensembles will study, read and perform representative chamber literature of all periods. May be repeated for credit. Instructional fee (except in 363K and optional in 363J). (2 hours activity)

#### 363B Brass

363G Guitar

363J Jazz Combo 363K Keyboard (S.S.) an ionbro 2 Isrod 2 (S.S.)

3638 Strings serion to seek a stoy to take one and take tupatary

363W Woodwind

363X Saxophone of the collection may be supposed to the same sequence of the same sequence of

### 363V Vocal Chamber Ensemble (1)

Prerequisites: Music 361B, E, or W, and consent of instructor. Singers and student directors will study, read, and perform representative choral chamber literature of all periods. May be repeated for credit. (2 hours activity)

365G Guitar Performance Workshop (1) Prerequisite: consent of instructor. Weekly workshop performances by students, faculty, and guests. Recommended for guitar majors each semester. May be repeated for credit.

# 365K Keyboard Workshop (1) and disw basedream asture

Weekly workshop performances by students, faculty, and guests. Recommended for keyboard major each semester. May be repeated for credit. Corequisite Coentoilment in Music

### 365V Vocal Workshop (1)

Application of vocal technique to performance practices through lecture-demonstration, master classes, and ancillary recitals. Recommended for vocal major each semester. May be repeated for credit.

# 372 Harpsichord Class for Music Majors (1)

Prerequisite: 300-jury level in piano or organ or consent of instructor. The harpsichord as an instrument, the application of baroque stylistic characteristics, and training in the rudiments of continuo playing in ensemble with voices and instruments. (2 hours activity) materials useful in greeklare study. 3010013278

#### 373 Organ Class for Music Majors (1)

Prerequisite: 300-jury level in piano or consent of instructor. The organ as an instrument, the playing techniques, and repertoire. The differences between piano and organ techniques. (2 hours activity)

#### 380A,B,C Diction for Singers (1,1,1)

Prerequisite: sophomore standing or consent of instructor. Proper singing diction; may not be considered a substitute for formal language study. Examples from standard vocal literature explained through the use of the International Phonetic Alphabet. A — Italian B — German C — French

#### 382A,B Instrumental Conducting (2,2)

Prerequisite: two courses from 281B, P.S. Wor consent of instructor. A — Principles, techniques, and methods of conducting orchestral and band groups. Required of all music education majors. Instructional fee. (4 hours activity) B — Continuation of 382A, including laboratory experience in conducting instrumental groups, using standard instrumental literature. Instructional fee. (4 hours activity)

#### 383A,B Choral Conducting (2,2)

Prerequisite: one semester of voice class or consent of instructor. A — Principles, techniques, and methods of conducting choral groups. Required of all music education majors. (4 hours activity) B — Continuation of 383A including laboratory work with class and vocal ensembles, using standard choral repertoire. (4 hours activity)

### 385K Functional Skills for Keyboard Majors (2)

Development of the ability to sight-read, harmonize, transpose, and improvise. (4 hours activity)

#### 385G Guitar Fingerboard Skills (2)

Prerequisite: upper-division guitar standing or consent of the instructor. Development of comprehensive understanding of the guitar fingerboard, with emphasis on scales, intervals, chord formation, harmonic progressions and sight-reading.

#### 386 Piano Accompanying (1)

Prerequisite: by audition only. Piano accompaniments for instrumentalists, vocalists, and ensembles. Participation in rehearsals, recitals and concerts required. May be repeated for credit. (2 hours activity) A remember of the remember of the beautiful and the second of the seco

#### 395 Internship: Professional Experience (1-3)

Fieldwork in music under supervision of resident faculty and professionals in the field. Requires minimum six hours fieldwork per week for each unit credit. May be repeated for credit to a maximum of six units. Open to all music students by consent of instructor.

#### 398 Recital (1)

Prerequisites: 300 jury level in the principal performance area and consent of instructor. Corequisite: Enrollment in Music 365K or V. Preparation and presentation of representative works in the principal performance area. In the semester of recital presentation, Music 398 will substitute for one unit of 393. In-

### 404 Microcomputers and MIDI for School Music Classrooms (3)

Prerequisite: Music Education 295 or equivalent. Pre-service and in-service music teachers will learn how to use microcomputers and musical instrument digital interface (MIDI) for classroom management and pedagogical purposes. Students will gain experience with software for word processing, database, spreadsheet, music notation, music pedagogy, and MIDI.

# 411 Survey of Music Theory (3)

Prerequisites: Completion of all lower-division theory requirements, and at least senior standing or equivalent. An examination of the theoretical basis of music from 1500 to the present through analysis, readings, and discussion. Intended primarily for graduate and postbaccalaureate students. Fulfills graduate entrance examination requirement in music theory. May not be applied to a graduate study plan.

#### 419 Advanced Form and Analysis (2) (Formerly 319B) Continuation of Music 319; larger musical works.

#### 422 Composition (2)

Prerequisites: Music 316, 319 and 320A or B or consent of instructor. Composition of smaller forms in various contemporary styles.

#### 424 Practicum: Electronic Music Laboratory (1)

Prerequisites: Music 320B, 493 level in applied music composition and consent of instructor. Individual and group instruction in electronic music composition. May be repeated for credit. (3 hours laboratory)

# 433 Music in Early Childhood (3)

Prerequisite: junior or senior standing. Songs, creative activities, and materials for teaching music in early childhood education. Teaching-learning strategies.

# 444 Survey of Marching Bands (2)

Prerequisite: consent of instructor. Techniques, materials, administration for marching band. Charting for field shows and parade activities.

# 450 History of Musical Style (3)

Prerequisites: Music 351A,B,C, or equivalent, or consent of instructor. Intensive review of the principal musical styles in Western music. Intended primarily for graduate and postbaccalaureate students. Fulfills graduate entrance examination requirement in music history. May not be applied to a graduate study

#### 451 Writing About Music (3)

Prerequisite: Music 351B or equivalent. Writing about music and related topics. Students will write and revise numerous brief papers and will analyze and critique the work of fellow students. Emphasis will also be placed on improving organizational, language, and research skills.

#### 453A,B Choral Literature and Interpretation (2,2)

A — Prerequisites: Music 383A or equivalent and 351A, B. Choral literature from Medieval, Renaissance, and Baroque eras analyzed in historical perspective. Appropriate performance practices. B — Prerequisites: Music 383A or equivalent and 351C. Continuation of A with examples from the Classic, Romantic, and Contemporary eras.

#### 454A,B Piano Literature and Interpretation (2,2)

Prerequisites: Music 351A, B and junior-level piano standing, or consent of instructor. Performance of representative styles and schools of piano literature; solo and ensemble repertoire. A contrapuntal forms, sonatas, and variations. B - Character pieces, fantasies, suites, and etudes.

### 456 Opera Literature and Interpretation (3)

Prerequisite: Music 351A, B, C or consent of instructor. All periods and nationalities, including stylistic and historical considerations.

#### 457A Song Literature and Interpretation (2)

Prerequisite: Music 319, 380B, or consent of instructor. Study and performance of German Lieder with representative examples of periods and styles. In seems of project where the resease of the

#### 457B Song Literature and Interpretation (2)

Prerequisite: Music 380C or consent of instructor. Study and performance of French art songs with representative examples of periods and styles.

#### 459A Guitar History and Literature (2)

Prerequisite: Music 251, 211 or equivalent. Upper-division guitar standing or consent of the instructor. Historical survey of the literature for classical guitar. Important works for lute, vihuela, and Baroque guitar, plus the compositions and transcriptions for Chnical practice and field applications of the rating medom rechiques classes, as in public and private schools. Coencul-

# 459B Guitar Pedagogy (2)

Prerequisite: Music 251, 211, or equivalent. Upper-division guitar standing or consent of the instructor. Fundamentals of teaching and coaching classical guitar. Materials and methods for Preroutistee Music Education, notice and group instruction.

# 463 Seminar in Black Music (3)

(Same as Afro-Ethnic Studies 463) Lina Issue bas ,ellula aon

### 466 Pedagogy Observation and Internship (1)

Prerequisite: junior-level piano standing or consent of instructor. Coenrollment in 467A,B or C required. Observation of and supervised internship in piano teaching. Teaching techniques, and development of lesson plans and materials will be included.

### 467A,B,C Piano Pedagogy (2,2,2)

Prerequisite: junior piano standing or consent of instructor. A — Materials and methods for beginning and elementary students. Coenrollment in Music 466 recommended. B — Materials and methods for intermediate and early advanced students. Coenrollment in Music 466 recommended. C - Materials and methods for class piano. Coenrollment in Music 466 recommended.

#### 468A,B Vocal Pedagogy (2,2)

Prerequisite: senior standing or consent of instructor. A - Fundamentals of vocal pedagogy for studio and public school teaching; physiology and acoustics as they apply to singing. B -Application of the fundamentals discussed in A. Seminar discussions and actual studio teaching. The diagnosis and cure of specific vocal problems. A manual and landauM of account 2 22

# 477 Piano Pedagogy Practicum (3)

Prerequisites: Music 467A, B, and C. Supervised piano teaching in individual and group learning environments. The following elements will be emphasized: keyboard technique, literature, communication skills, lesson plans and piano curriculum.

#### 496 Student-to-Student Tutorials (1-3)

Prerequisites: a 3.0 or more grade-point average and/or consent of instructor and simultaneous enrollment in the course or previous enrollment in a similar course or its equivalent. Consult "Student-to-Student Tutorials" in this catalog for more complete course description. The second second

#### 497 Senior Project (1)

Independent investigation of an area of special interest in music culminating in a research paper, public performance, lecture, or lecture-recital. Instructional fee.

#### 498 Recital (1)

Prerequisites: 400 jury level in the principal performance area (400 jury level in composition for composition majors) and consent of instructor. Corequisite: Coenrollment in Music 3651,K, or V. Preparation and presentation of representative works in the principal performance area. In the semester of recital presentation, Music 498 will substitute for one unit of Music 493. Instrucbers and lectures by the instructor. Requirements can see lanoit

# 499 Independent Study (1-3)

A special topic in music selected in consultation with and supervised by the instructor. May be repeated for credit.

### 500 Introduction to Graduate Study in Music (3)

Required of all music graduate students within the first nine study-plan units. Basic bibliography, literature, and research techniques, and materials useful in graduate study.

### 524 Seminar in Music Theory (3)

Theoretical subjects (form/style analysis, history of music theory, etc.) to be chosen by instructor. May be repeated for credit.

#### 552 Seminar in Music of the Renaissance (3)

Prerequisite: Music 351A,B,C; Music 500 or equivalent. The forms, styles, and characteristics of music between 1400 and 1600. Analysis of works by representative composers and theoretical writers.

#### 553 Seminar in Music of the Baroque Period (3)

Prerequisite: Music 351A,B,C; Music 500 or equivalent. Musical forms, styles, and performance practices of the Baroque period. Analysis of representative works.

#### 554 Seminar in Music of the Classic Period (3)

Prerequisite: Music 351A,B,C; Music 500 or equivalent. The history and literature of music from approximately 1730 to 1826. Analysis of representative works.

#### 555 Seminar in Music of the Romantic Period (3)

Prerequisite: Music 352A,B,C; Music 500 or equivalent. The structure and development of music in the 19th century. Analysis of representative works.

#### 567 Seminar in Piano Pedagogy (3)

Graduate-level study of advanced learning theories, musical issues, and pedagogical methods involved in teaching piano through lectures, discussions, and student presentations. Practice teaching required.

### 569 Seminar In Piano Concerti (3)

Advanced study of piano concerti with performance and analysis by class members and lectures by the instructor. Requirements can be met by performance and/or analysis.

# 570G Seminar in Guitar Literature (3)

Prerequisite: Music 500 or consent of the instructor. Advanced study of guitar literature, with performances and analysis by class members and lectures by the instructor. Requirements can be met by performance and/or analysis. Topics include guitar sonatas, guitar concertos, and solo guitar works of Heitor Villa-Lobos. May be repeated for credit.

#### 570P Seminar in Piano Literature (2)

Prerequisite: Music 500 or consent of instructor. Advanced study of piano literature, with performances and analyses by class members and lectures by the instructor. Requirements can be met by performance and/or analysis. May be repeated for credit.

# 582 Seminar in Advanced Instrumental Conducting and Interpretation (2)

Prerequisite: Music 382B, keyboard facility for score reading, and consent of instructor. Conducting techniques. Interpretive problems of each period covered in lectures. May be repeated for credit.

# 583 Seminar in Advanced Choral Conducting and Interpretation (2)

Prerequisite: Music 383B, conducting experience, or consent of instructor. Choral conducting techniques. Lab work with student groups and concert conducting. May be repeated for credit.

#### 593 Individual Instruction (1)

Prerequisite: jury recommendation. Individual instruction with approved instructor. Emphasis on performance techniques and repertoire. May be repeated for credit. Instructional fee.

### 597 Project (3)

The culminating experience of M.M. students as well as M.A. students in Music education who do not elect to write a thesis or take a comprehensive exam. M.M. Project: A public recital (sometimes 2) accompanied by written program notes and a related paper. M.A. (Music Education) Project: A significant, written research study. Students must submit an enrollment request form by week one of the preceding semester. Instructional fee.

### 598 Thesis (3)

Individual investigations of specific problems in the area of concentration by candidates for the M.A. degree. Students must submit an enrollment request form by week one of the preceding semester. Instructional fee.

#### 599 Independent Graduate Research (1-3)

Prerequisite: Graduate standing in music and consent of instructor. Research and study projects in areas of specialization beyond regularly offered coursework. Oral and written reports required. Students must submit an enrollment request form by week one of the preceding semester.

# Music Education Courses

295 Clinical Practice in Instrumental/Choral Techniques (1) Clinical practice and field applications of instrumental/choral techniques classes, as in public and private schools. Coenrollment in Music 383B or 382B recommended. (3 hours weekly to be arranged in nearby school)

#### 394A Practicum in School Materials and Techniques (2)

Prerequisite: Music Education 295. For music education majors. Experience in sequential pedagogy, classroom delivery skills, and concurrent development of management skills, aural discrimination skills, and aural and visual diagnostic skills.

#### 394B Practicum in Skills for Teaching Music (2)

Prerequisite: Music Education 394A. Corequisite: Music Education 395A or 395B. For music education majors. Observation and application of musical concepts and materials, sequential pedagogy, nonverbal teaching strategies, and classroom delivery and management skills. Continued development of aural and visual diagnostic skills and aural discrimination skills.

#### 395A Clinical Practice in Instrumental Conducting (1)

Prerequisite: Music Education 295. Clinical practice and field applications of concepts, materials and procedures as applied to field situations, as in public and private schools. Co-enrollment in Music Education 394B.

#### 395B Clinical Practice in Choral Conducting (1)

Prerequisite: Music Education 295. Clinical practice and field applications of concepts, materials and procedures as applied to field situations, as in public and private schools. Co-enrollment in Music Education 394B.

#### 442 Principles and Methods of Teaching Music in the Public Schools (3)

Prerequisite: admission to teacher education. History, principles of public education, grades K-12, with emphasis on music. Philosophy, methods, materials and procedures for organizing and teaching music in elementary and secondary schools. Must take concurrently with Secondary Education 440F and 440S.

#### 449E Externship in Secondary Teaching (3)

Must be taken concurrently with Music Education 442. For candidates who have declared for the single subject credential in music. See description and prerequisite under Department of Secondary Education.

#### 449I Internship in Secondary Teaching (10)

For candidates who have declared for the single subject credential in music. See description and prerequisite under Department of Secondary Education.

#### 449S Seminar in Secondary Teaching (2)

Must be taken concurrently with Music Education 449I. For candidates who have declared for the single subject credential in music. See description and prerequisites under Department of Secondary Education.

#### 501 Contemporary Music Education (3)

Recent innovations and overview of the history, philosophy, and methodology of the art of teaching music. Trends and applications of educational theory in relation to the teaching of music.

#### 529 Advanced Pedagogy in Music Education (3)

Advanced pedagogical strategies for music teaching and learning, including world approaches to music education (e.g., Kodaly, Suzuki, Orff), current music learning theory, and applications from cognitive and developmental psychology. Implications and applications for school music classes and curriculum development.

# 531 Foundations of Music Education (3)

Philosophical, historical, psychological, and aesthetic bases of music education. Contemporary trends and future directions of music education.

# 533 Psychology of Music (3)

Contemporary topics merging research and practice in the fields of music teaching and learning theory. Topics include: musical behavior, psychoacoustical parameters of music, perception, affective response, musical memory, learning theory, musical cog-

# Department of Theatre and Dance

Department Chair: Sallie Mitchell
Department Office: Performing Arts 157
Production Office: Performing Arts 126

Programs Offered
Bachelor of Arts in Theatre Arts

History and Theory
Production/Performance
Teaching

Bachelor of Arts in Dance
Master of Arts in Theatre Arts
Master of Fine Arts in Theatre Arts

Acting
Directing
Technical Theatre and Design
Secondary Teaching Credential

#### Faculty

Barbara Arms, Joseph Arnold, Don Finn, John Fisher, Susan Hallman, Dean Hess, Lawrence Jasper, Robin Johnson, Gretchen Kanne, Gladys Kares, Dan Kern, Arthur Lessac (Distinguished Visiting Professor), Juan Lopez, Alex MacKenzie, William Meyer, Sallie Mitchell, S. Todd Muffatti, Jose Quintero (Distinguished Visiting Professor), Lara Teeter, James Volz, Ron Wood, Abel Zeballos

#### INTRODUCTION

The Department of Theatre and Dance undergraduate and graduate programs include the fields of acting, dance, directing, musical theatre, oral interpretation, playwriting, technical production and design, television, theatre for young audiences, theatre history and theory. Specifically, the course work and theatrical and dance production activities are arranged to provide opportunities for students (1) to develop an appreciation for theatre arts and dance; (2) to become aware, as audience or participants, of the shaping force of theatre arts and dance in society; (3) to improve the knowledge and skills necessary for work in the theatrical arts and dance as a profession; (4) to pursue graduate studies; and (5) to prepare for teaching theatre.



Public performance is at the center of the department's programs. Therefore, continuing stage, dance and television production activities are essential for all students at California State University, Fullerton, including the undergraduate and graduate theoretical student as well as the undergraduate pre-professional and graduate conservatory student. In conjunction with on-campus dance productions the Department of Theatre and Dance offers dancers and choreographers additional experience in its adjunct company: Dance Repertory Theatre. The company is made up of carefully selected California State University, Fullerton graduates and advanced students, chosen on the basis of demonstrated excellence in their work at the University. Dance Repertory Theatre presents lecture/ demonstrations and performs locally, as well as scheduled tours throughout the year.

#### General Major Requirements

The concentration in History and Theory in theatre is for those who wish to study theatre as a cultural contribution or who wish to pursue graduate degrees in theatre with emphasis in theatre history and theory. It is strongly recommended that students electing this plan support the major with approved electives from art, music, foreign languages, literature, philosophy or speech.

The concentration in Production/Performance in theatre is designed to develop competency for pursuing the theatrical arts as a profession, or for pursuing graduate degrees in theatre with an emphasis in an area of concentration other than history of the theatre. Areas of emphasis are: acting, directing, musical theatre, oral interpretation, playwriting, technical design and tele-Thearre 110 Oral Communication of Extracted Union

The concentration in Teaching in theatre meets the requirements of the teaching credential with specialization in secondary teach-Dealers 278 Costume Transmission (2) areas Inc.

The Bachelor of Arts in Dance is designed to develop competency for pursuing dance as a profession or for pursuing a graduate degree in dance.

In addition to the requirements listed below for the major, students must meet the other university requirements for a bachelor of arts degree. Students pursuing a concentration in Teaching must meet all specific requirements for the desired teaching credential. See description of secondary school teaching credential program under Department of Secondary Education. In addition, students pursuing the teaching concentration should see the department's secondary education adviser regarding course sequence required for the single subject waiver in English.

To qualify for a baccalaureate degree with a major in theatre or dance, students must have a C or better in all theatre or dance courses required for the degree. In addition to course requirements, all theatre and dance majors will enroll for two units of Theatre 478B each semester of residency up to a maximum of eight semesters.

Theatre 477B with a grade of C or better fulfills the upperdivision writing requirement for theatre majors. Dance 325 with a grade of C or better fulfills the upper-division writing requirement for dance majors.

Theatre 200, or its equivalent, is a prerequisite for all upper-division theatre courses with the exception of Theatre 478A, B. Transfer students may take Theatre 200 concurrently with their first semester of upper-division courses. Prior to entering their junior year, or upon transferring to Cal State Fullerton, all students electing an Acting emphasis under the Production/Performance concentration or the major in Dance will be evaluated and advised as to potential for advancement in the emphasis or major.

#### BACHELOR OF ARTS IN THEATRE ARTS

# Theatre History and Theory Concentration

Lower Division (15 units required)

Theatre 110 Oral Communication of Literature (3)

Theatre 200 Art of the Theatre (3)

Theatre 263A Beginning Acting — Majors (3)

Theatre 276A Beginning Stagecraft (3)

Theatre 277 Costume Fundamentals (3)

Upper Division (42 units required)

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Theatre 310 Oral Interpretation of Shakespeare (3)

Theatre 364 Seminar in Playwriting (3)

Theatre 370A Fundamentals of Directing (3)

Theatre 377 Stage Costuming (3)

Theatre 386 Beginning Lighting (3)

Theatre 388 Historical Styles for Scene Design (3)

Theatre 475A,B,C,D, or E World Theatre (15)

Theatre 477A,B Seminar in Critical Techniques (6)

Electives in Theatre (3)

#### Production/Performance Concentration Theatre 200) 25th of the Theatre

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Lower Division (24 units required) managed SM some

Theatre 110 Oral Communication of Literature (3)\*

Theatre 141A,B Voice/Movement for Stage (6)

Theatre 200 Art of the Theatre (3)

Theatre 263A,B Beginning Acting — Majors (6)

Six units selected from:

Theatre 276A Beginning Stagecraft (3)

Theatre 277 Costume Fundamentals (3)

Theatre 285 Theatrical Makeup (3)

Theatre 288 Design for the Theatre (3)

#### Upper Division (36 units required)

Theatre 310 Oral Interpretation of Shakespeare (3)

Theatre 363A,B Intermediate Acting (6)

Theatre 370A Fundamentals of Directing (3)

Theatre 463A, B Advanced Acting (6)

Theatre 475A,B,C,D, or E World Theatre (12)

Theatre 477B Seminar in Critical Techniques (3)

Theatre 482 Acting for Television (3)

# Directing Emphasis

Lower Division (24 units required)

Theatre 141A,B Voice/Movement for Stage (6)

Theatre 200 Art of the Theatre (3)

Theatre 263A, B Beginning Acting — Majors (6)

Theatre 276A Beginning Stagecraft (3)

Theatre 277 Costume Fundamentals (3) or

Theatre 285 Theatrical Makeup (3)

Theatre 288 Design for the Theatre (3)

#### Upper Division (35 units required)

Theatre 350 Stage Management (2)

Theatre 370A,B Fundamentals of Directing (6)

Theatre 386 Beginning Lighting (3)

Theatre 450 Theatre Management (3)

Theatre 470A,B Advanced Directing (6)

Theatre 475A,B,C,D, or E World Theatre (12)

Theatre 477B Seminar in Critical Techniques (3)

All theatre majors with an emphasis in directing must assistant stage manage a mainstage production either prior to or concurrently with Theatre 470A. Advanced Directing, and must stage manage a mainstage production prior to graduation.

#### Musical Theatre Emphasis

Lower Division (25 units required)

Theatre 141A, B Voice/Movement for Stage (6)

Theatre 200 Art of the Theatre (3)

Theatre 263A, B Beginning Acting — Majors (6)

Dance 142 Beginning Tap Dance (2)

Dance 212 Intermediate Classical Ballet (2)

Dance 232 Intermediate Jazz Dance (2)

Music 111A Diatonic Harmony (2)

Music 111AL Diatonic Harmony Lab (1)

Music 184A Piano Class (1) or equivalent

#### Upper Division (33 units required)

Theatre 363A,B Intermediate Acting (3,3)

Theatre 370A Fundamentals of Directing (3)

Theatre 436A,B Musical Theatre Workshop (6)

Theatre 475 World Theatre (A,B,C, or D) (9)

Theatre 475E World Theatre (3)

Theatre 477B Seminar in Critical Techniques (3) Dance 336 Dance for Musical Theatre (3)

All theatre majors with an emphasis in Musical Theatre must prove competency in piano. The state bear and applications and relief with

#### Oral Interpretation Emphasis

Lower Division (21 units required)

Theatre 110 Oral Communication of Literature (3)\*

Theatre 141A,B Voice/Movement for the Stage (6)

Theatre 200 Art of the Theatre (3)

Theatre 263A Beginning Acting — Majors (3)

Theatre 276A Beginning Stagecraft (3)

Theatre 277 Costume Fundamentals (3) or

Theatre 285 Theatrical Makeup (3)

#### Upper Division (36 units required)

Theatre 310 Oral Interpretation of Shakespeare (3)

Theatre 370A, B Fundamentals of Directing (6)

Theatre 410A,B,C Oral Interpretation of Prose, Poetry and Drama (9)

Theatre 411 Oral Interpretation of Children's

Literature (3) Theatre 475A,B,C,D, or E World Theatre (12)

Theatre 477B Seminar in Critical Techniques (3)

#### Playwriting Emphasis

Lower Division (15 units required)

Theatre 110 Oral Communication of Literature (3)\*

Theatre 200 Art of the Theatre (3)

Theatre 263A Beginning Acting — Majors (3)

Theatre 276A Beginning Stagecraft (3) or

Theatre 277 Costume Fundamentals (3)

Theatre 288 Design for the Theatre (3)

#### Upper Division (41 units required)

Theatre 350 Stage Management (2)

Theatre 364 Seminar in Playwriting (3,3)

Theatre 370A, B Fundamentals of Directing (6)

Theatre 386 Beginning Lighting (3)

Theatre 470A, B Advanced Directing (6)

Theatre 475A,B,C,D, or E World Theatre (12)

Theatre 477A,B Seminar in Critical Techniques (6)

# Technical Production/Design Emphasis

Lower Division (21 units required)

Theatre 200 Art of the Theatre (3)

Theatre 263A Beginning Acting — Majors (3)

Theatre 276A,B Beginning Stagecraft/Drafting (6)

Theatre 277 Costume Fundamentals (3)

Theatre 285 Theatrical Makeup (3)

Theatre 288 Design for the Theatre (3)

#### Upper Division (35 units required)

Theatre 350 Stage Management (2)

Theatre 370A Fundamentals of Directing (3)

Theatre 377 Stage Costuming (3) or

Theatre 476 Design of Stage Mechanics and Rigging (3)

Theatre 379 Rendering for the Theatre (3)

Theatre 386 Beginning Lighting (3)

Theatre 388 Historical Styles for Scene Design (3)

Theatre 475A,B,C,D, or E World Theatre (9)

Theatre 477B Seminar in Critical Techniques (3)

Theatre 486 Advanced Lighting (3)

Theatre 488 Advanced Design and Technology (3)

#### Television Emphasis

#### Lower Division (18 units required)

Theatre 110 Oral Communication of Literature (3)\*

Theatre 184 Introduction to Radio and Television (3)

Theatre 200 Art of the Theatre (3)

Theatre 263A Beginning Acting — Majors (3)

Theatre 276A Beginning Stagecraft (3)

Theatre 284 Introduction to Television Production (3)

#### Upper Division (39 units required)

Theatre 365 Television Writing (3)

Theatre 370A,B Fundamentals of Directing (6)

Theatre 384 Television Production and Direction (3)

Theatre 386 Beginning Lighting (3)

Theatre 475A,B,C,D, or E World Theatre (6)

Theatre 477B Seminar in Critical Techniques (3)

Theatre 484 Television Dramatic Techniques (3)

Theatre 480 Television/Film Aesthetics and

Criticism (3)

Theatre 489 Cable Television Production Workshop (3)

and 6 units electives selected from:

Theatre 277 Costume Fundamentals (3) Theatre 285 Theatrical Makeup (3)

Design for the Theatre (3) Theatre 288

Theatre 387 Audio Techniques (3)

Theatre 486 Advanced Lighting (3)

Theatre 489 Cable Television Production Workshop (3)

Theatre 495 Internship (3)

#### Teaching Concentration (Single Subject)

Lower Division (27 units required)

Theatre 141A,B Voice/Movement for the Stage (6)

Theatre 200 Art of the Theatre (3)

Theatre 263A, B Beginning Acting — Majors (6)

Theatre 276A Beginning Stagecraft (3)

Theatre 277 Costume Fundamentals (3)

Theatre 285 Theatrical Makeup (3)

Theatre 288 Design for the Theatre (3)

Upper Division (29 units required) at manufactor of notes and A

Theatre 350 Stage Management (2)

Theatre 370A,B Fundamentals of Directing (6)

Theatre 386 Beginning Lighting (3)

Theatre 402B Dramatic Activities for Children (3)

Theatre 470A Advanced Directing (3)

Theatre 475A,D,E World Theatre (9)

Theatre 477B Seminar in Critical Techniques (3)

or English 301 Advanced College Writing (3)

Theatre Education majors are required to complete the Waiver Program in English.

\*Meets General Education requirement in oral communication for theatre and

#### **BACHELOR OF ARTS IN DANCE**

Lower Division (16 Units Required)

Dance 112 Beginning Classical Ballet (2)

Dance 122 Beginning Modern Dance (2)

Dance 126 Dance Improvization (2)

Dance 132 Beginning Jazz Dance (2) or

Dance 142 Beginning Tap Dance (2)

Dance 212 Intermediate Classical Ballet (2)

Intermediate Modern Dance (3) Dance 222

Dance 226 Rhythmic Analysis (3)

#### Upper Division (31 Units Required)

Dance 312 Advanced Classical Ballet (3)

Dance 323A,B Dance Composition (3, 3)

Dance 324 Forces and Figures in Dance (3)

Dance 325 Dance Theory and Criticism (3)

Dance Kinesiology (3) Dance 372

Dance 422 Advanced Modern Dance (3)

Dance 423 Advanced Dance Composition (3)

Dance 424 Fundamentals of Dance Instruction (3) or

Dance 471 Creative Dance for Children (3)

Dance 425 Dance Repertory (3)

Dance 497 Senior Projects in Dance (1)

# Electives (10 Units Required)

Minimum of two units from: Dance 232, 242

Minimum of thre units from: Dance 301, 332, 336, 412, 424, or 471

Minimum of three units from: Theatre 277, 284, 285, 384, 386, or 387 DA manimed emubero 886 emen

#### MASTER OF ARTS IN THEATRE ARTS

The Master of Arts in Theatre Arts provides a program of coordinated graduate studies built on undergraduate preparation; incentive for intellectual growth reflected in teaching and professional recognition; and a sound basis for continued graduate study in theatre. The student is expected to demonstrate a high degree of intellectual and creative competence.

#### Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see section of this catalog on admission of graduates for complete statement and procedures).

#### Graduate Standing: Classified

A student who meets the admission requirements and the following requirements may be granted classified graduate standing upon the development of an approved study plan: an appropriate undergraduate major in theatre, with a grade-point average of 3.0 in all upper-division work in the major, or at least 24 units of appropriate upper-division work in theatre, with a GPA of 3.0; satisfactory completion of the Graduate Writing Requirement; and, an oral interview. Upon recommendation of the student's graduate committee, additional prerequisites may be required prior to classification and the approval of the area of emphasis.

#### Study Plan

The study plan will include at least 30 units of adviser-approved graduate studies, 15 units of which must be 500-level courses. Study plan course work must be completed with an overall minimum 3.0 grade-point

Each program will consist of 24 units in theatre including a thesis. Projects in playwriting may be considered in lieu of a thesis. All students must also pass oral and written examinations. Written comprehensive examinations will be given during the seventh and eighth weeks of the spring semester. Students must apply to the graduate coordinator prior to the beginning of the semester in which they intend to take the written examination. Students will be permitted to take the written examination

#### Required Courses (18 units)

Theatre 477A Seminar in Critical Techniques (3)

Theatre 500 Introduction to Graduate Studies (3)

Theatre 501 Graduate Seminar: Advanced Theatre Theory (3)

Theatre 573T Seminar in Dramatic Literature (3)

Theatre 575T Seminar in Theatre History (3)

Theatre 583 Graduate Seminar: Acting (3)

#### Electives (9 units)

As part of their electives, students may select a maximum of six units of adviser-approved supporting courses in related fields from courses outside the Department of Theatre and Dance.

Thesis/Project (3 units)

Theatre 597 Project (3) or Theatre 598 Thesis (3)

For further information, consult the Department of Theatre and Dance.

#### MASTER OF FINE ARTS IN THEATRE ARTS (TECHNICAL THEATRE/DESIGN, ACTING AND DIRECTING)

This degree is for students who wish professionally oriented education and training in design/technical theatre, acting, and directing. It is the objective of the department to educate and train highly skilled, motivated individuals for careers in professional theatre (including television and film) or for careers as artistteachers in college or university theatre. Only those who demonstrate an exceptional talent, a high degree of motivation, and a deep commitment to their education and training will be admitted into the program. The highest academic and creative standards will be demanded throughout the program. A positive attitude and a rigid sense of theatre discipline are essential for success in the program.

The degree requires 60 units of approved course work. Average length of time to complete the program is three years.

#### Admission to Graduate Standing: Classified

Prerequisites for admission to the program and granting of classified standing are: page 157 page 157 page 157

- 1. B.A., B.F.A. or M.A. from an accredited college or university with a major in theatre; or a degree in a related field and extensive work in technical theatre, acting, or directing.
- 2. Completion of an oral interview and satisfactory review of the student's portfolio or audition.
- 3. Acceptance by the faculty.
- 4. Minimum GPA of 3.0 in all upper-division undergraduate work in theatre. A minimum GPA of 2.75 for the last half of the undergraduate program is also required.
- 5. Completion of any additional prerequisites which may be required by the student's individual committee prior to classification.
- 6. Selection of a graduate adviser and committee. Total committee membership should be three or four faculty members, including the adviser. The support of the support o
- 7. Submission of a formal M.F.A. study program approved by the individual committee, the department graduate adviser and the dean of graduate studies.
- 8. Must meet the Graduate Writing Requirement.

Admission to Graduate Standing: Conditionally Classified	Theatre 563 Acting Studio (6) Theatre 570A,B Styles of Directing/Performance (12)
Students who do not meet certain prerequisites may be considered for admission in conditionally classified graduate standing.	Theatre 573T Seminar in Dramatic Literature (3) Theatre 575T Seminar: Theatre History (3)
Consult the graduate program adviser.	Theatre 597 Graduate Project (6) Theatre 599 Independent Research (3)
Study Plan — Acting	
Course Requirements Units	Take 12 units adviser-approved electives (includes 6 units technical coursework)
Take all of the following:	technical coursework)         12           Total         60
Theatre 443 Audition and Rehearsal Processes (3) Theatre 500 Intro to Graduate Studies (3) Theatre 563 Acting Studio (16) Theatre 570A,B Styles of Directing Performance (6) Theatre 583 Graduate Seminar: Acting (3)  Take one of the following:	M.F.A. Projects in Directing  The M.F.A. in Directing Program requires the completion of three creative projects, which have been approved by the individual's committee and which by their nature, are of sufficient challenge and complexity to be accepted as worthy completion of the period of study. These projects shall be mounted and presented by the Department of Theatre and Dance as a portion of its
Theatre 436A,B Musical Theatre Workshop (6) Theatre 573T Seminar in Dramatic Literature (3) Theatre 575T Seminar in Theatre History (3)  Additional advisor approved courses required in Dramatic Analysis, Television, Voice and Movement, Showcase 20	production program. The program shall culminate in a project book submitted by the M.F.A. candidate to the individual's committee. The project book will clearly and objectively articulate the process of formulating the final mainstage project from initial concept to critical reaction, utilizing experiences and material discovered through both classroom participation and the development of the production. Before the degree is granted, each
Complete two creative projects:	student will pass an oral examination over the project book.  Study Plan — Technical Theatre/Design
Theatre 597 Project (6)	Students should concentrate their activities in two of the following four technical theatre areas during their two year course of study: scene design, costume design-makeup, lighting-sound, and technical production.
The M.F.A. in Acting requires the completion of two creative	
projects which, by their nature, are of sufficient challenge and complexity to be accepted as worthy completion of the period of	Course Requirements* Units  Take all of the following:
study. These projects, which shall be performances in major departmental productions, shall be approved by the individual's committee. In addition, the program will culminate in a project book submitted by the M.F.A. candidate to the individual's com-	Theatre 477A Seminar in Critical Techniques (3) Theatre 500 Introduction to Graduate Study (3) Theatre 575T Seminar in Theatre History (3)
mittee. The project book will clearly and objectively articulate the development of the candidate's process as an actor based on	Take nine units from the following: 9
the various experiences in and materials discovered through both classroom and performance. Before the degree is granted, each student will pass an oral examination over the project book.	Theatre 566 Graduate Seminar: Stagecraft (3) Theatre 577 Graduate Seminar: Costuming (3) Theatre 578 Graduate Seminar: Scene Design (3) Theatre 586 Graduate Seminar: Lighting (3)
Study Plan — Directing	276A Beginning Stagecraft (3)
Course Requirements* Units	Take the following four times:
Take all of the following:	Theatre 588 Design and Tech Theatre (6)  Choose 12 adviser-approved units from technical courses in
Theatre 470A Advanced Directing (3) Theatre 470B Advanced Directing (3) Theatre 477A Seminar in Critical Tech (3) Theatre 484 Television Dramatic Tech (3)	theatre, art or engineering
Theatre 500 Introduction to Graduate Studies (3)	Total

#### M.F.A. Projects in Design

The M.F.A. Program in Technical Theatre/Design shall be culminated by two creative projects which, by their nature, are of sufficient challenge and complexity to be accepted as worthy completion of the period of study. These projects are determined by the individual committee and shall be design assignments for major productions. Each project shall be reviewed by the individual committee within two weeks after completion. If accepted, the student shall submit a project book within a specified time. Before the degree is granted, each student will pass an oral examination over the project book.

\*Based on a student's previous undergraduate or professional experience, substitutions or revisions in the study plan might be appropriate.

# Dance Courses

# 101 Introduction to Dance (3)

Historical and contemporary dance forms. Experiences in various dance forms such as ballet, modern, jazz, folk, Afro, mime. Recommended for non-majors.

#### 112 Beginning Classical Ballet (2)

The fundamental structure and technique of classical ballet. May be repeated once for credit. (4 hours activity)

# 122 Beginning Modern Dance (2)

Exploration and manipulation of the instrument and materials of dance; development of aesthetic judgment. May be repeated once for credit. (4 hours activity)

### 126 Dance Improvisation (2)

Theory and practice of improvisation in movement. Practical use of improvisation in expressing imagery, developing choreographic concepts, and enhancing performance. (4 hours activity)

### 132 Beginning Jazz Dance (2)

Modern jazz dance techniques and basic jazz choreography. (4 hours activity)

#### 142 Beginning Tap Dance (2)

Structure and technique of tap dance and tap choreography. (4 hours activity)

#### 212 Intermediate Classical Ballet (2)

Prerequisites: Dance 112 and audition. Intermediate level technique of classical ballet. May be repeated once for credit. (4 hours activity)

### 222 Intermediate Modern Dance (3) and hole almbA

Prerequisites: Dance 122 and audition. Intermediate modern dance and movement vocabulary in terms of composition and communication. May be repeated for credit. (6 hours activity)

#### 226 Rhythmic Analysis (3)

Musical form and structure; musically notating dance rhythms and percussion accompaniment.

#### 232 Intermediate Jazz Dance (2)

Prerequisites: Dance 132 and consent of instructor. Intermediate level skills in jazz technique and choreography. (4 hours activity)

#### 242 Intermediate Tap Dance (2)

Prerequisite: Dance 142 or consent of instructor. Intermediate skills in tap technique and choreography. (4 hours activity)

### 301 Dance and Cultural Diversity (3)

Prerequisites: Dance 101 or consent of instructor. Impact of various dance forms, from primitive time to modern, on diverse cultures. Contributions of immigrants, minorities and women to dance as a personal, social and cultural expression.

# 312 Advanced Classical Ballet (3)

Prerequisites: Dance 212 and audition. Stylization and performance of classical ballet. May be repeated once for credit. (6 hours activity)

#### 323A,B Dance Composition (3,3)

A — Prerequisites: Dance 122, 126, or equivalents. Study of basic elements and forms of dance composition. B - Prerequisite: Dance 323A or consent of instructor. Problem solving studies in space, time, and energy, using choreographic devices in solo and group situations. Final project required. (6 hours activity) These projects, which shall be verbrant to (viting)

# 324 Forces and Figures in Dance (3)

Prerequisite: consent of instructor. A history of dance from primitive times to the present.

# 325 Dance Theory and Criticism (3)

Prerequisites: Dance 101, 122A or consent of instructor. Theory and criticism of dance. Comparison and relationship of dance principles and criticism among major dance genres, in addition to other art forms. Fulfills the course requirement for the university upper-division baccalaureate writing requirement for dance majors.

#### 332 Advanced Jazz Dance (3)

Prerequisites: Dance 232 and consent of instructor. Advanced jazz techniques and choreography through grade three of professional jazz dance. The relation of jazz to other forms of dance. (6 hours activity)

# 336 Dance for Musical Theatre (3)

Prerequisites: Dance 112, 132, and audition, or consent of instructor. Dance utilized in musical theatre. Ensemble and individual approaches to the style. (6 hours activity)

### 372 Dance Kinesiology (3)

Structural aspects of the human body and factors that affect movement in dance.

#### 412 Classical Pointe (3) and bon nousubor I notativals \$88

Prerequisites: Dance 312 and consent of instructor. Techniques for performance of classical pointe. May be repeated once for credit. (6 hours activity)

#### 422 Advanced Modern Dance (3)

Prerequisites: Dance 222 and audition. Advanced level skills in modern dance. Emphasis on individual techniques. May be repeated for credit. (6 hours activity)

# 423 Advanced Dance Composition (3)

Prerequisite: Dance 323A,B or equivalent. Elements and forms in dance composition. The choreographing of dances of concert quality. (6 hours activity)

#### 424 Fundamentals of Dance Instruction (3)

Prerequisites: Dance 112, 222, 226, 323A, 372, and consent of instructor. Philosophies, techniques and methods for developing progressions in dance instruction.

# 425 Dance Repertory and Performance (3)

Prerequisites: Dance 212. Learning and rehearsing choreography of established and/or new dance works with performance intent. May be repeated for credit. (6 hours activity)

#### 471 Creative Dance for Children (3)

Prerequisite: Upper division standing. Methods and materials for teaching creative dance to children. (6 hours activity)

#### 497 Production and Performance Projects in Dance (1-3)

Prerequisites: upper division standing and consent of instructor; application form with appropriate signatures must be on file in department office prior to registration. Projects which culminate in production or performance. May be repeated for credit.

#### 499 Independent Study (1-3)

Prerequisites: upper division standing and consent of instructor; application form with appropriate signatures must be on file in department office prior to registration. Undergraduate research projects. May be repeated for credit.

# Theatre Courses

# 100 Introduction to the Theatre (3)

For the general student leading to an appreciation and understanding of the theatre as an entertainment medium and as an art form. Recommended for non-majors.

### 110 Oral Communication of Literature (3)

The analysis and performance of literary works through the medium of oral interpretation. An emphasis upon understanding the content of communication in literature as well as the form. An exploration of the techniques involved in the discovery, critical evaluation and performance of various literary speakers. Meets the General Education requirement in Oral Communication for Theatre/Dance majors. hopping an appropriate from the story

#### 141A,B Voice/Movement for Stage (3,3)

Prerequisites: Theatre 141 is prerequisite to 141B. Intensive training in the integral use of the voice and body for the actor; developing skills for vocal and physical relaxation, flexibility, and strength. May be repeated once for credit.

### 163 Acting for Non-Majors (3)

The form and content of acting: improvisation, action, motivation, and behavior. Recommended for non-majors. (6 hours Corerequisite: Theatre 370A. Backstage management (strivity)

#### 184 Introduction to Radio and Television (3)

The broadcasting industry and its impact and influence on our society. Broadcasting practices, audiences, production and programming.

200 Art of the Theatre (3) Theatre as an art form, involving the interrelated processes of playwriting, directing, acting, design and theatre management. Study of plays, films and television with emphasis on dramatic analysis and cultural significance. Required of all theatre majors.

#### 263A,B Beginning Acting — Majors (3,3)

Prerequisite for 263B: Theatre 200, 141A, B and 263A. Improvisations, exercises, and techniques of acting for the stage. Motivation and behavior in characterization. (6 hours activity)

#### 276A Beginning Stagecraft (3)

Planning and construction of stage and television scenery. Use of tools and stage equipment. Work in the scene shop for department productions is required. May be repeated for credit. (6 hours activ-

#### 276B Drafting (3)

Prerequisite: 276A. Drafting and reading of technical drawings. Work in the scene shop for department productions is required. May be repeated for credit. (6 hours activity) Identities leading and not

#### 277 Costume Fundamentals (3)

Costuming theatrical and television productions. Construction techniques, organization and duties of the costume crew. (6 hours

#### 284 Introduction to Television Production (3)

The fundamentals of production for television. (6 hours activity)

### 285 Theatrical Makeup (3)

Makeup for stage and television. Individual skill in character analysis, application in pigment, plastic, hair, makeup, and selection and use of makeup equipment. (6 hours activity)

#### 288 Design for the Theatre (3)

Scene design, including script analysis, formation of visual concepts, floor plan development and model building for stage and television. (6 hours activity)

#### 310 Oral Interpretation of Shakespeare (3)

Prerequisite: Upper division standing; Theatre 110 or consent of instructor. Development of techniques for oral interpretation of Shakespeare with special emphasis on the problems of verse.

#### 315 Chicano/Latino Theatre (3)

(Same as Chicano Studies 315)

### 350 Stage Management (2)

Corerequisite: Theatre 370A. Backstage management, including interrelationships of production personnel for stage and television.

#### 363A,B Intermediate Acting (3,3)

Prerequisites: Theatre 200, 141A,B, 263A,B and audition. Characterization; roles, special problems, and application of acting techniques through exercises and two-character scenes from the contemporary theatre. (6 hours activity)

# 364 Seminar in Playwriting (3)

Prerequisites: evidence of interest in creative writing and consent of instructor. Study of superior models, development of style, and group criticism and evaluation of independent work, as it relates to playwriting. May be repeated for credit.

### 365 Television Writing (3)

Prerequisite: English 101. The writing of scripts and other forms of continuity for television. May be repeated for credit.

#### 370A,B Fundamentals of Directing (3,3)

Prerequisites: Theatre 263A, or consent of instructor. 370A is prerequisite to B. Prerehearsal problems and procedures, structural analysis of plays, composition, picturization, pantomimic dramatization, movement and rhythm on stage and in television. Practice in directing scenes. (6 hours activity)

#### 377 Stage Costuming (3)

Fashions and textiles of major historical periods, methods of research; interpretation and communication of historical dress for theatrical statement. The second of the statement of the second of t

#### 379 Rendering for the Theatre (3)

Scenic and costume sketching and rendering for communication between production director and designers. Full scale costume and scenic painting required. Theoretical and actual production idea presentation and execution. (6 hours activity)

#### 381 Radio and Television Announcing (3)

Prerequisite: Theatre 110. Control room operation, including practice in microphone and camera techniques. (6 hours activity)

#### 384 Television Production and Direction (3)

Prerequisites: Theatre 284. Theory and practice in the production of television programs and announcements: the planning, organizing, directing, rehearsing, performing, recording and editing of television programs and announcements. (6 hours activity)

#### 385 Advanced Theatre Makeup (3)

Prerequisite: Theatre 285. Problems in makeup including special techniques and materials: prosthetics, hairpieces, and masks for stage and television productions. (6 hours activity)

# 386 Beginning Lighting (3)

Theories of lighting for stage and television productions. (6 hours activity)

#### 387 Audio Techniques (3)

Practice necessary to integrate live and recorded sound into performing arts productions. Recording, reproduction and studio techniques. (6 hours activity)

#### 388 Historical Styles for Scene Design (3)

Visual survey through lecture and slides of architecture, interior design and furniture from ancient to modern times. Provides necessary basis for advanced design course.

#### 402A,B Dramatic Activities for Children (3,3)

Prerequisite: Upper division standing. Creative dramatics as a tool for building and developing creative and socialized processes in children. A — Sense memory, movement/mime, dialogue, characterization, dramatization. B - Teaching techniques including concentration, imagination, dramatization, and improvisation for adolescents. (6 hours activity)

#### 403A,B Theatre for Young Audiences (3,3)

Prerequisite: 403A prerequisite for 403B or consent of instructor. Theatrical production for an audience of children. A — Philosophy, theory and practice; B - Application of production principles. (6 hours activity)

#### 410A Oral Interpretation of Prose Literature (3)

Prerequisite: upper division standing. Criticism and performance in the oral interpretation of prose literature.

#### 410B Oral Interpretation of Poetry (3)

Prerequisite: upper division standing. Criticism and performance in the oral interpretation of poetry.

# 410C Oral Interpretation of Drama (3)

Prerequisite: upper division standing. Criticism and performance in the oral interpretation of drama.

#### 411 Oral Interpretation of Children's Literature (3)

Prerequisite: upper division standing. Oral presentation of children's literature in classroom, recreation and home situations including individual and group performance of fiction, nonfiction, fantasy and poetry.

#### 436A,B Musical Theatre Workshop (3,3)

Prerequisites: Theatre 363B, Dance 336, and audition. Theatre 436A prerequisite to B. Roles and excerpts from musical theatre: the musical, dramatic, language and dance techniques. Scenes and musical numbers in workshop. A — Large group and solo work. B — Small group and audition material preparation. (6 hours activity)

#### 443 Audition and Rehearsal Processes (3)

Prerequisites: Theatre 363A,B. Auditioning and rehearsal processes for professional work in theatre, television and film. Includes techniques for selecting material and performance preparation. (6 hours activity)

#### 450 Theatre Management (3)

Oranizational principles of front-of-house and box office operation. Participation in School of the Arts public presentations. (3 hours lecture, 6 hours activity)

#### 463A,B Advanced Acting (3,3)

Prerequisites: Theatre 310, Theatre 363A, B and audition. Historical theories and techniques of styles of acting. A - Greek through renaissance periods. B - The neoclassic periods to contemporary styles. (6 hours activity)

### 470A,B Advanced Directing (3,3)

Prerequisites: Theatre 288, 350, and 370A, B, or consent of instructor. Readings in theory, analysis of scripts and practice in directing plays for their oral and visual value as theatre. A -Each student directs a one-act play. B — Each student directs two one-act plays or equivalent. (6 hours activity)

#### 475A,B,C,D,E World Theatre (3,3,3,3,3)

Prerequisite: upper-division standing. The historical and dramatic evolution of world theatre. A - Ancient Greece and Rome, Middle Ages; Italian renaissance; B — England from 1558-1790; 16th- and 17th-century Spain and France; C - 18th- and 19thcentury Europe and Russia; 19th-century England; D - 18thand 19th-century America; the Orient; the modern world; E-Historical background and contemporary view of the musical theatre.

#### 476 Design of Stage Mechanics and Rigging (3)

Prerequisites: Theatre 276A,B, Theatre 288 and consent of instructor. Evolution, theory and implementation of mechanics and rigging for the stage. Emphasis on current practices and future implications.

#### 477A Seminar in Critical Techniques (3)

Prerequisite: Theatre 200. Major critical theories in theatre.

#### 477B Seminar in Writing Critical Techniques (3)

Prerequisite: Theatre 200. Practical criticism as applied to local dramatic productions. Fulfills the university upper-division baccalaureate writing requirement for theatre arts majors.

#### 478A,B Production and Performance (2,2)

A — Performing in stage or television productions. B — Technical crew work on stage or television performances. One section of 478B per semester required of all theatre majors as well as nonmajors cast in theatre department productions. (More than 6 hours activity)

#### 480 Television/Film Aesthetics and Criticism (3)

Prerequisites: Theatre 384 or consent of instructor. The nature of film and television; aesthetic and theoretical and critical bases for film and television evaluation and understanding.

#### 482 Acting for Television (3)

Prerequisites: Theatre 363A,B. The adaptation of stage techniques for the camera; audition, rehearsal, and final performance, utilizing videotape and studio equipment. (6 hours activity)

483 Advanced Acting Workshop (3) Prerequisites: Theatre 463A,B and audition. Extensive scene study, based on particular needs and problem areas of the advanced acting student. (6 hours activity)

### 484 Television Dramatic Techniques (3) olbute nonoA Ede

Prerequisites: Theatre 384 and consent of instructor. Techniques of production for the director, actor and designer in televised drama. (6 hours activity) dramate characteristics of the content o

#### 486 Advanced Lighting (3)

Prerequisites: Theatre 386 or consent of instructor. Design and technology of lighting for the stage and television. (6 hours activity) May be repeated for credit. Italians but activity

### 487 Advanced Audio Techniques (3)

Prerequisite: Theatre 387 or consent of instructor, advanced problems in the design and technology of live and recorded sound used in the performing arts. (6 hours activity)

# 488 Advanced Design and Technology (3)

Prerequisites: Theatre 276A,B, 277, 288 and consent of instructor. Advanced design, coordination of scenery and/or costume design projects for various types of theatres and television. May be repeated for credit.

#### 489 Cable Television Production Workshop (3)

Prerequisites: six units of television production and consent of instructor. Practical experience in the creation of full-length television dramatic productions for cable broadcasting. May be repeated for credit. (6 hours activity) and valid saleyland altern

#### 495 Theatre Internship (3) and all landing of seeing? ATTA

Consent of appropriate faculty supervisor. Supervised work experience in all areas of theatre to expand the dimensions of the classroom by integrating the formal academic training with direct application. Periodic seminar meetings to discuss work.

#### 497 Production and Performance Projects in Theatre (1-3)

Prerequisites: upper division standing and consent of instructor; application form with appropriate signatures must be on file in department office prior to registration. Projects which culminate in production or performance. May be repeated for credit.

#### 499 Independent Study (1-3)

Prerequisites: upper division standing and consent of instructor; application form with appropriate signatures must be on file in department office prior to registration. Undergraduate research projects. May be repeated for credit.

#### 500 Introduction to Graduate Study in Theatre (3)

Methodological problems in graduate research. Location of source materials, including library and original data; interpretation of research and practice in scholarly writing. Must be taken the first semester after admission to graduate study.

#### 501 Graduate Seminar: Advanced Theatre Theory (3)

Prerequisite: Theatre 500. Directed research; the relationship between historical backgrounds and developments in the theatre and the student's area of concentration.

### 563 Acting Studio (4)

Prerequisite: audition. Re-creation and interpretation of roles utilizing period and contemporary dramatic literature, interrelating voice, movement, characterization and period style acting. Enrollment limited to M.F.A. students. May be repeated for credit.

#### 566 Graduate Seminar: Stagecraft (3)

Prerequisite: consent of instructor. Advanced theories in the preparation and installation of scenery for theatrical production; engineering drawings, exploration of materials, and research into new methods of theatre technology. May be repeated for credit up to six units. The state of consequences of the state of t

### 570A,B Styles of Directing/Performance (3,3)

Prerequisites: Theatre 470A, B or consent of instructor. Research in the theories of directing and acting styles and practice in directing and performance of period plays. A - Staging and acting problems from Greek tragedy through the Restoration. B — Staging and acting problems from recent classical work (Ibsen, Strinberg, Chekhov) to present. May be repeated once for credit.

#### 489 Cable Television Production Workshop (3) 573T Seminar in Dramatic Literature (3)

Directed research and criticism in the examination of contributions of major dramatists or dramatic genres. Emphasis on dramatic analysis. May be repeated for credit.

#### 575T Seminar in Theatre History (3)

Directed research and criticism in the examination of a significant historical periods or movements in theatre history. May be repeated for credit.

# 577 Graduate Seminar: Costuming (3)

Prerequisite: consent of instructor. Costume production problems and their solutions. Examination of specific designers, past and present. Research in pratical methods of interpreting the deisgner's sketch. May be repeated for credit up to six units.

#### 578 Graduate Seminar: Scene Design (3)

Prerequisite: consent of instructor. Scenic design projects involving in-depth production style and scheme development. May be repeated for credit up to six units.

#### 583 Graduate Seminar: Acting (3)

Prerequisites: Theatre 463A, B. Investigation and delineation of current acting methods as techniques for solving problems presented by popular dramatic literature. Development of a personal acting philosophy and methodology. May be repeated once for credit. around the far selecting material and performent about

#### 586 Graduate Seminar: Lighting Design (3)

Prerequisite: consent of instructor. Advance theoretical lighting design projects. Production problems and their solutions. Examination of specific designers, past and present. May be repeated for credit up to six units.

#### 588 Graduate Projects in Design and Technical Theatre (6)

Theoretical projects and designs for productions prior to final projects. Faculty and student critiques. Tailored to individual student needs. Enrollment limited to M.F.A. students.

#### 597 Project (1-3)

Prerequisites: consent of instructor, student's graduate committee and department executive committee. Development and presentation of a creative project beyond regularly offered coursework. May be repeated for credit up to six units. Student must complete course application form by the end of the seventh week of the semester preceding that in which the work is to be done.

#### 598 Thesis (3)

Prerequisites: consent of student's graduate committee; application form with apropriate signatures must be on file in department office prior to registration. Development and presentation of a thesis in the student's area of concentration.

#### 599 Independent Graduate Research (1-3)

Prerequisites: consent of student's graduate committee and instructor; application form with appropriate signatures must be on file in department office prior to registration. Research in theatre. May be repeated for credit.

# Theatre Education Courses

442 Teaching Theatre in the Secondary School (3) Prerequisite: admission to teacher education. Objectives, methods and materials for teaching in the secondary school.

449E Externship in Secondary Teaching (3) See description under Department of Secondary Education. 449I Internship in Secondary Teaching (10) See description under Department of Secondary Education.

449S Seminar in Secondary Teaching (2) See description under Department of Secondary Education. 4494 intereship in Secondary Teering (10) See descript on index Department of Secondary Edicar

4458 Sentings in Secondary Reaching (23) See description under Department of Secondary Education

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# Theatre Education Courses

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449E Externship in Secondary Teaching (3) See description under December of expending followings.

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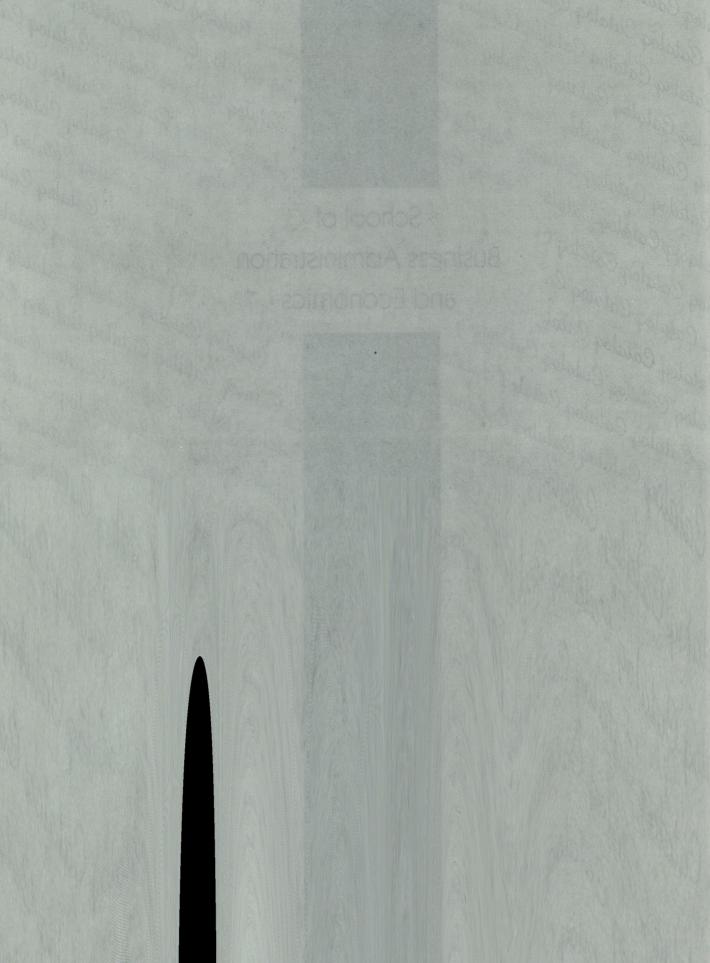
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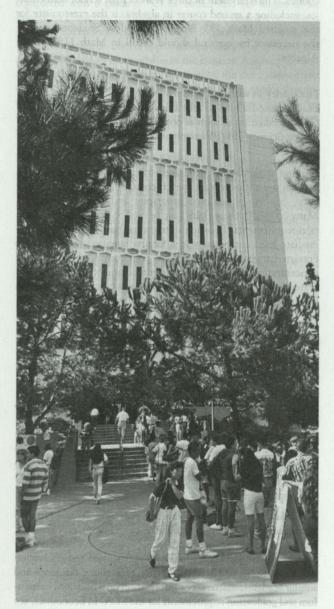
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# School of Business Administration and Economics



Dean: Ephraim P. Smith and a squared of another a discounting Associate Deans: Dorothy Heide, Undergraduate Programs Richard Stolz, Graduate Studies

# Programs Offered Progra

Bachelor of Arts in Business Administration Concentrations in:

Accounting Business Economics

Finance
Management

Management

Management

Management Information Systems
Management Science
Marketing

# Bachelor of Arts in Economics

#### Bachelor of Arts in International Business

Concentrations in:

The University's Mission has three major elements: Arrange

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Portuguese Spanish

## Minor in Business Administration and and a moggaz all

Minor in Economics

Minor in Management Information Systems

Master of Science in Accountancy

#### Master of Business Administration

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## Master of Science in Management Science

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Master of Science in Taxation

#### INTRODUCTION

Programs of study in the School of Business Administration and Economics equip men and women with the intellectual and professional tools needed to assume responsible positions in business, industry, education, government, and social service. The school offers a broad exposure to business administration and economics. Behavioral and quantitative sciences are studied in both theoretical and applied contexts. Mathematics is used as a key tool in the analysis of complex problems and in the interpretation of data. Emphasis is placed on effective oral and written communication. Students are made aware of the need for imaginative, innovative solutions to business problems that encompass human needs and ethical objectives.

The school provides the opportunity to develop technical expertise in a chosen discipline at a beginning professional level acceptable to prospective employers. Seven concentrations are offered within the business administration major as well as an economics major, an international business major and a business education credential program.

The School of Business Administration and Economics offers the only programs in Orange County accredited by the American Assembly of Collegiate Schools of Business. Accreditation assures a rigorous course of study covering the full spectrum of business administration. It also indicates a well-qualified faculty, high standards for students, access to computing and an extensive library system.

#### Mission Statement

The University's Mission has three major elements: (1) excellence in instruction, (2) actively involved faculty, and (3) support for the instructional mission (see "Philosophy and Objectives" section of this catalog).

In support of the University's Mission, the School of Business Administration and Economics has built its Mission around its students and faculty as well as university service and community outreach. In each of these areas, the School will pursue specific goals:

- Students: Provide students with opportunity to obtain an education that will enable them to grow intellectually, personally and professionally throughout life.
- Faculty: Foster an intellectual climate that supports faculty in their efforts to advance and convey knowledge and learning through their teaching and research, recognizes differing viewpoints, respects academic and personal freedom and promotes teaching innovation.
- Students and Faculty: Attract and retain a diverse student body and faculty through a collegial environment that endorses social responsibility and accountability, honesty and equity, and supports activities that enhance the learning opportunity.

- Outreach: Encourage outreach activities that address community, regional and world needs.
- Service: Support faculty involvement in collegial governance and shared decision-making processes.

#### Preparation for Undergraduate Degree Programs

Algebra and geometry are necessary for many required business courses. The equivalent of three years of high school mathematics, including a second course in algebra, is the prerequisite for the required Math 135 Business Calculus. Students without the necessary background should enroll in Math 115 College Algebra.

Proficiency in written English is essential to all college courses. Students should plan to take the written English component of General Eduation as soon as possible and take the English Writing Proficiency (EWP) examination while juniors.

Business students are encouraged to take courses in sociology, psychology, anthropology, speech communication, political science, history, philosophy, geography and foreign languages. Many courses in these fields may be used to meet general education requirements. For the international business degree, intermediate level competency in a foreign language, equivalent to Foreign Language 204 courses, is prerequisite to the required concentration courses. It is strongly recommended that students planning to major in international business complete a minimum of three years of foreign language study while in high school.

#### Business Advising Center Langsdorf Hall, Room 700

Undergraduate Program Advising

The Business Advising Center serves business administration, economics and international business majors. Information is available on admissions, curriculum and graduation requirements, as well as on registration and grading procedures, residence and similar academic matters. Transfer students should see an adviser immediately regarding transfer credit. For information on general education, consult the Academic Advisement Center.

Graduate Program Advising

The graduate adviser (in the Business Advising Center) provides academic advising for the graduate programs in accountancy, business administration, management science and taxation. Information is available on admissions, curriculum and graduation requirements, as well as on registration procedures, residence and similar academic matters. For information on admission, curriculum and graduation requirements for the M.A. in Economics, see the graduate program coordinator in the Economics Department. Students also should consult the faculty coordinators for the programs in accountancy, management science and taxation.

#### Transfer Credit for Business and Economics Courses

Students should see an adviser immediately regarding transfer credit. College level courses successfully completed at another college or university may be applied towards the requirements of the SBAE subject to the approval of the appropriate department chair. Lower division courses completed at an appropriately accredited institution with a grade of "C" or better that are equivalent in content and level may be considered. Upper division transfer courses will be considered if the course is (a) equivalent in content and level, (b) completed with a grade of "C" or better, and (c) taught in an American Assembly of Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards. Lists of approved equivalent courses from local community colleges are available in the Business Advising Center. All other courses are subject to approval by the department chair concerned. In these cases, the student must supply catalog descriptions, course outlines and textbook titles. Courses taken in the extension division of another university, or by correspondence, are generally not acceptable.

#### Internships and Cooperative Education

Students may earn academic credit, first-hand work experience and financial remuneration as well. Opportunities exist in accounting and auditing; cost-benefit analysis and econometrics; finance and real estate; insurance and banking; management and industrial relations; marketing, sales and advertising; and business data systems. For more information, consult the internship adviser in your department or in the Center for Internships and Cooperative Education.

#### Student Organizations

Chapters of the following national honor societies have been established on campus with membership open to qualified students: Beta Alpha Psi (accounting), Beta Gamma Sigma (business), Delta Sigma Pi (business), Financial Management Association Honor Society (finance), Omicron Delta Epsilon (economics), Phi Kappa Phi (all-campus), Pi Sigma Epsilon (marketing). In addition there are the following clubs which students are encouraged to join: Accounting Society, AIESEC, APICS (American Production and Inventory Control Society), Black Business Students, Data Processing Management Association, Economics Association, Finance Association, Inter-Club Council, American Marketing Association, Personnel and Industrial Relations Association, Personnel Management Association of Aztlan, Rho Epsilon, Securities and Investment Association, and The Institute of Management Science.

#### Prizes in Business Administration and Economics

Stephen J. Barres Leadership Award
Theodore H. Smith Outstanding Graduate Student Award
Executive Council Outstanding Student Award
Executive Council Outstanding Faculty Award
See also awards listed under each department.
For additional information on awards and scholarships available
to business students, contact the office of the Dean, Langsdorf
Hall 700.

#### Computer Facilities

The CSUF Computer Center in McCarthy Hall and the SBAE Satellite Computer Laboratory in Langsdorf Hall are available for student use. Facilities include terminals (which access the campus' main computers), microcomputers, and printers. Computer facilities are generally available evenings and weekends during the school year.

### Information on the Degree Requirements

Accountancy, Master of Science See "Department of Accounting"

Business Administration, Bachelor of Arts
Business Administration, Master of Business Administration
Business Administration, Minor
See "Business Administration Degrees"

Economics, Bachelor of Arts
Economics, Master of Arts
Economics, Minor
See "Department of Economics"

International Business, Bachelor of Arts See "International Business Program"

Management Information Systems, Minor See "Management Information Systems"

Management Science, Master of Science See "Department of Management Science"

Taxation, Master of Science See "Department of Accounting"

# Department of Accounting

Administrator: Gerald B. Hoth Department Office: Langsdorf Hall 630

Programs Offered

Bachelor of Arts in Business Administration

Concentration in Accounting

Master of Science in Accountancy

Master of Business Administration

Concentration in Accounting

Master of Science in Taxation

#### Faculty

Mary Fleming, Paul Foote, Clyde Hardman, Mahamood Hassan, A. Jay Hirsch, Gerald Hoth, K.J. Kim, Keith W. Lantz, Andrew Luzi, Don Marshall, Robert McCabe, Robert Miller, Jacob Paperman, Christopher Petruzzi, Shirish Seth, Ephraim Smith, Randy Swad

#### Advisers

The Business Advising Center, Langsdorf Hall 700, provides information on admissions, curriculum and graduation requirements; registration and grading procedures; residence and similar academic matters. In addition, the Accounting Department Administrator provides advising on curriculum content and career opportunities in Accounting, the CPA Examination, and Taxation.

#### INTRODUCTION

Accounting is often referred to as "the language of business." Very generally, the accounting process is concerned with recording, classifying, reporting and interpreting the economic data of an organization. These data are important to users, who may include managers, investors and other interested groups. Accounting helps in decision-making processes by showing how money has been spent and where commitments have been made, by judging performance and by showing the implications of following different courses of action. Reliable information in a dynamic business environment is necessary for sound decisions concerning the allocation of scarce resources. Thus accounting plays a very significant part in our social and economic systems.

Programs in accounting are designed for students who are interested in careers in public accounting, industry, government, or service organizations, and for students who intend to work for advanced degrees in accounting in preparation for teaching and



#### Credential Information

The Department of Accounting offers courses which may be included in the Single Subject Waiver Program in Business. Further information on the requirements for teaching credentials is contained in the Teacher Credential Programs section of this catalog.

#### Awards in Accounting

American Society of Women Accountants, Orange County Amy Vanasse Memorial Award Arthur Anderson & Company BDO Seidman Becker CPA Review California Society of CPAs Conviser Duffy CPA Review Coopers & Lybrand Dauberman CPA Review Deloitte & Touche Ernst & Young Grant Thornton Company Haynie & Company KPMG Peat Marwick

#### BACHELOR OF ARTS IN BUSINESS **ADMINISTRATION**

Outstanding Senior Award

Scott Bankhead & Company

See "Business Administration Degrees, Accounting Concentration."

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#### MASTER OF SCIENCE IN ACCOUNTANCY

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The Master of Science in Accountancy program provides the conceptual understanding and technical competence for a career in professional accounting. Employment opportunities include public accounting, industrial accounting and government. The program encompasses both a theoretical foundation and technical skills. Emphasis is placed on the development of a professional attitude and the capacity to deal with issues of accounting policy and ethics. Graduates should be prepared for entry-level positions, and for potential advancement in the profession.

The M.S. in Accountancy program is scheduled especially for students who are employed full time. Courses are offered during the late afternoon and evening. Most students enroll on a parttime basis, taking two courses (6 units) per semester.

The curriculum is designed for students with an undergraduate degree in business administration with a concentration in accounting. In addition to seven required accounting courses, there are two electives and a terminal, research-project course. Students not holding an undergraduate degree in accounting or business may apply; qualified candidates will be admitted to post baccalaureate unclassified standing or conditionally classified standing as explained in the Admissions section below.

Cal State Fullerton is the only university in Orange County accredited by the American Assembly of Collegiate Schools of Business at both the undergraduate and graduate level. This assures a rigorous program, a well qualified faculty, high standards for students, and access to an extensive library system. The qualifications of the M.S. in Accountancy faculty include advanced degrees in accounting, taxation, and law; practical experience; and professional standing as CPAs, CMAs, and attorneys.

Most graduate courses in the School of Business Administration and Economics require "classified SBAE status" and are open only to students with classified standing in the M.B.A., M.S. in Accountancy, M.S. in Taxation, M.S. in Management Science, or M.A. in Economics programs.

#### Admission

Students meeting the following requirements will be admitted to postbaccalaureate unclassified standing.

- 1. Acceptable bachelor's degree from an institution accredited by a regional accrediting association, or equivalent.
- 2. Grade-point average of at least 2.5 in the last 60 semester units attempted and in good standing at the last college attended.

Note: Postbaccalaureate unclassified students may enroll in undergraduate courses (100 through 400 level) but generally are ineligible for graduate business courses (500 level). Such students may wish to take undergraduate courses which are necessary to meet the requirements for classified standing (see below). Upon completing the requirements, the student may file an "Application for Change of Academic Objective — Graduate" requesting admission to the M.S. in Accountancy program. Admission to the university as a postbaccalaureate unclassified student does not constitute admission to the M.S. in Accountancy program, does not confer priority, nor does it guarantee future admission. Students planning to apply for admission to the M.S. in Accountancy program should confer with the graduate adviser in the School of Business Administration and Economics.

Students meeting the following additional requirements may be admitted to the M.S. in Accountancy program with conditionally classified standing:

- 3. Combination of GPA and score on the Graduate Management Admission Test (GMAT) sufficient to yield a score of at least 950 according to one of the following formulas. Due to limited facilities and resources in the School of Business Administration and Economics, a higher score is usually required of all applicants. It was a supplicant of the second of the secon
  - A. If overall undergraduate GPA is at least 2.5 and GMAT is at least 450, then score = (GPA x 200) + GMAT.

- If overall undergraduate GPA is below 2.5 or GMAT is below 450, then score =  $(GPA \times 200) + GMAT - 50$ .
- If GPA is based on the last 60 semester units of course work\* then score =  $(GPA \times 200) + GMAT - 100$ .

\* All work within any given quarter or semester must be included even though that will result in more than 60 semester units. The units to be included in the last 60 semester units may come only from the following: (1) work taken in postbaccalaureate status during the last seven years to be used to fulfill M.S. in Accountancy course work requirements; (2) units taken under a prescribed remedial program agreed to by the Associate Dean of Graduate Studies, School of Business Administration and Economics; (3) units earned prior to the bachelor's degree.

Conditionally classified students may take a limited number of graduate courses (500 level) subject to the approval of the graduate adviser of the School of Business Administration and Economics. Students may take whatever courses are necessary to fulfill requirement 4 (below) while enrolled as conditionally classified students. In addition, a maximum of 9 units (three courses) from the M.S. in Accountancy curriculum may be taken while in conditionally classified standing.

Students meeting the following additional requirements will be advanced to classified standing. Such students are eligible to take graduate courses for which they qualify.

- 4. A bachelor's degree with a major in business administration and a concentration in accounting which meets the requirements stated in this catalog for such degrees. The degree must include calculus and computer information systems equivalent to passing Mathematics 135, Business Calculus (3 units) and Management Science 265, Introduction to Information Systems and Computer Programming (3 units), with grades of at least C. Courses in the major are to be no more than seven years old, and courses in the accounting concentration no more than five years old. Courses in the major (including the accounting concentration) must have at least a 3.0 (B) GPA; courses with grades lower than C must be repeated with at least a C grade. Applicants with a bachelor's degree in a field other than Business Administration may meet this requirement by completing the courses in calculus and computer information systems (above) with grades of at least C, courses in the accounting concentration, and also the Foundation Courses within the curriculum of the Master of Business Administration (27 units, including Accounting 510; Business Admin 590; Economics 515; Finance 517; Management 516, 518; Management Science 513, 515 and Marketing 519). Both the accounting concentration courses and the MBA Foundation Courses must have at least a 3.0 (B) GPA; accounting concentration courses and Foundation Courses with grades lower than C must be repeated with at least a C grade.
- 5. Approval of study plan.

#### Curriculum

The curriculum requires 30 semester units of course work beyond the baccalaureate degree. At least 24 of the 30 units required for the degree must be at the graduate level. A GPA of 3.0 (B) is required. Any study plan course in which a D is received must be repeated with at least a C grade regardless of the overall GPA of the student.

#### Required Courses

Accounting 502 Seminar in Accounting Theory (3) Accounting 503 Seminar in Contemporary Accounting

Problems (3)

Accounting 505 Seminar in Auditing (3)

Seminar in Professional Accounting Accounting 506 Communications (3)

Accounting 507 Seminar in Acctg. Information Systems (3)

Accounting 521 Seminar in Admin. Accounting (3)

Accounting 572 Seminar in Taxation of Corporations and Shareholders (3)

#### Electives in Accounting or Related Business Fields

Two courses (6 units) at the 400 or 500 level, to be selected in consultation with, and approved by, the program coordinator.

#### Terminal Evaluation

Accounting 597 Project (3)

#### MASTER OF BUSINESS ADMINISTRATION

See "Business Administration Degrees, Accounting Concentration."

#### MASTER OF SCIENCE IN TAXATION

The Master of Science in Taxation program provides the conceptual understanding and technical competence for a career in taxation. Employment opportunities include the tax departments of CPA and law firms, as well as corporations and government tax agencies. For those already employed in this field, the M.S. in Taxation program should meet the continuing education requirements of professional associations and licensing boards.

The M.S. in Taxation program is scheduled especially for students who are employed full time. Courses are offered during the late afternoon and evening. Most students enroll on a part-time basis, taking two courses (6 units) per semester.

The curriculum is designed for students with an undergraduate degree in business administration or accounting. In addition to six required courses in the field of taxation, there are three electives and a terminal, research-project course. Students not holding an undergraduate degree in accounting or business may apply; qualified candidates will be admitted to postbaccalaureate unclassified standing or conditionally classified standing as explained in the Admissions section, below.

Cal State Fullerton is the only university in Orange County accredited by the American Assembly of Collegiate Schools of Business at both the undergraduate and graduate level. This assures a rigorous program, a well qualified faculty, high standards for students, and access to an extensive library system. The qualifications of the M.S. in Taxation faculty include advanced degrees in taxation, accounting, and law; practical tax experience; and professional standing as CPAs and attorneys.

Most graduate courses in the School of Business Administration and Economics require "classified SBAE status" and are open only to students with classified standing in the M.B.A., M.S. in Accountancy, M.S. in Taxation, M.S. in Management Science, or M.A. in Economics programs.

## Admission soon level-song vythope are blad there has a sufficient

Students meeting the following requirements will be admitted to postbaccalaureate unclassified standing:

- 1. Acceptable bachelor's degree from an institution accredited by a regional accrediting association, or equivalent.
- 2. Grade-point average of at least 2.5 in the last 60 semester units attempted and in good standing at the last college attended.

Note: Postbaccalaureate unclassified students may enroll in undergraduate courses (100 thru 400 level) but are generally ineligible for graduate business courses (500 level). Such students may wish to take undergraduate courses which are necessary to meet the requirements for classified standing (see below). Upon completing the requirements, the student may file an "Application for Change of Academic Objective Graduate" requesting admission to the M.S. in Taxation program. Admission to the university as a postbaccalaureate unclassified student does not constitute admission to the M.S. in Taxation program, does not confer priority, nor does it guarantee future admission. Students planning to apply for admission to the M.S. in Taxation program should confer with the graduate adviser in the School of Business Administration and Economics.

Students meeting the following additional requirements will be admitted to the M.S. in Taxation program with conditionally classified standing: 17 driw assessor 57do gostanteminis assessad

- 3. Combination of GPA and score on the Graduate Management Admission Test (GMAT) sufficient to yield a score of at least 950 according to one of the following formulas. Due to limited facilities and resources in the School of Business Administration and Economics, a higher score may be required of all applicants. It is a special applicants of all applicants. It is a special applicant of all applicants of all applicants.
  - A. If overall undergraduate GPA is at least 2.5 and GMAT is at least 450, then score =  $(GPA \times 200) + GMAT$ .

- B. If overall undergraduate GPA is below 2.5 or GMAT is below 450, then score =  $(GPA \times 200) + GMAT - 50$ .
  - If GPA is based on the last 60 semester units of course work\* then score =  $(GPA \times 200) + GMAT - 100$ .

\* All work within any given quarter or semester must be included even though that will result in more than 60 semester units. The units to be included in the last 60 semester units may come only from the following: (1) work taken in postbaccalaureate status during the last seven years to be used to fulfill M.S. in Taxation course work requirements; (2) units taken under a prescribed remedial program agreed to by the Associate Dean of Graduate Studies, School of Business Administration and Economics; (3) units earned prior to the bachelor's degree.

Conditionally classified students may take a limited number of graduate courses (500 level) subject to the approval of the graduate adviser of the School of Business Administration and Economics. Students may take whatever courses are necessary to fulfill requirement 4 (below) while enrolled as conditionally classified students. In addition, a maximum of 9 units (three courses) from the M.S. in Taxation curriculum may be taken while in conditionally classified standing.

Students meeting the following additional requirements will be advanced to classified standing. Such students are eligible to take graduate courses for which they qualify.

- 4. A bachelor's degree with a major in business administration which meets the requirements stated in this catalog for such degrees, and Accounting 308, Concepts of Federal Income Tax Accounting (or an equivalent course or work experience). The degree must include calculus and computer programming equivalent to passing Mathematics 135, Business Calculus (3 units) and Management Science 265, Introduction to Information Systems and Computer Programming (3 units), with grades of at least C. Courses in the major are to be no more than seven years old and must have at least a 3.0 (B) GPA; courses with grades lower than C must be repeated with at least a C grade. Applicants with a bachelor's degree in a field other than Business Administration may meet this requirement by completing the courses in calculus and computer programming (above) with grades of at least C, Accounting 308 with a grade of at least C, and also the Foundation Courses within the curriculum of the Master of Business Administration (27 units, including Accounting 510; Business Admin 590; Economics 515; Finance 517; Management 516, 518; Management Science 513, 515 and Marketing 519). The MBA Foundation Courses must have at least a 3.0 (B) GPA; Foundation Courses with grades lower than C must be repeated with at least a C grade.
- 5. Approval of study plan.

Curriculum The curriculum requires 30 semester units of course work beyond the baccalaureate degree. At least 21 of the 30 units required for the degree must be at the graduate level. A GPA of 3.0 (B) is required. Any study plan course in which a D is received must be repeated with a C grade regardless of the overall GPA of the student.

#### Required Tax Course

Accounting 470 Tax Research, Practice and Procedures (3)

#### Electives in Taxation and Related Fields

Five courses (15 units) to be selected in consultation with, and approved by, the student's adviser.

Available courses include but are not limited to:

Accounting 408 Problems in Taxation (3)

Accounting 508 Seminar in Tax Planning (3)

Accounting 572 Seminar in Taxation of Corporations and Shareholders (3)

Accounting 573 Seminar in Taxation of Property Transactions (3)

Accounting 574 Seminar in Taxation of International Business Operations (3)

Accounting 575 Seminar in Estate, Gift and Inheritance Taxes and Estate Planning (3)

Accounting 576 Seminar in State & Local Taxation (3)

Accounting 577 Seminar in Taxation of Employee Compensation (3)

Accounting 578 Seminar in Taxation of Partnerships (3)

#### Other Electives

Courses are to be selected in consultation with, and approved by, the student's adviser.

One course (3 units) in either economics or political science and two courses (6 units) in either business or non-business fields.

Note: recommended courses in economics and political science include Econ 517, Poli Sci 421, 519, 528.

#### Terminal Evaluation

Accounting 597 Project (3)

# **Accounting Courses**

#### 201A Financial Accounting (3)

Prerequisite: None. Accounting concepts and techniques essential to the administration of a business enterprise: analyzing and recording financial transactions; accounting valuation and allocation practices; preparation, analysis and interpretation of financial statements; international accounting issues. (Not open to freshmen) and whose state to leverge A . 3

#### 201B Managerial Accounting (3)

Prerequisite: Accounting 201A. Introduction to managerial accounting; product costing; budgetary control and responsibility accounting; analysis and techniques for aiding management planning and control decisions; basic income tax concepts for planning business transactions. (Not open to freshmen)

# 301A,B Intermediate Accounting (3,3)

Prerequisites for 301A: Accounting 201B, a passing score on the accounting qualifying examination, and completion of all lower division business administration core courses with grades of at least C in each course. Prerequisite for 301B: A grade of C or better in Accounting 301A. Accounting theory; preparation of income statements, balance sheets and statements of changes in financial position; present value and amount concepts; assets, liabilities and stockholders equity; price-level accounting; pensions; leases; earnings per share; financial statement analysis; accounting changes and error analysis.

#### 302 Cost Accounting (3)

Prerequisites: Accounting 201B, a passing score on the accounting qualifying examination, and completion of all lower division business administration core courses with grades of at least C in each course, or a grade of C or better in 301A. Accounting information for management of manufacturing enterprises; cost records; cost behavior and allocation; product costing and inventory valuation; flexible budgeting; standard costs; responsibility accounting; cost planning and control; and operating decision analysis.

#### 303 Accounting for Governmental & Nonprofit Entities (3) Prerequisite: Accounting 201B or equivalent with a grade of C or better. Fund accounting as applied to governmental and nonprofit entities; state and federal governments, municipalities, hospitals and universities. Budgets, tax levies, revenues and appropriations, expenditures and encumbrances, various types of funds, and accounting statements.

#### 308 Concepts of Federal Income Tax Accounting (3)

Prerequisites: Accounting 201B, a passing score on the accounting qualifying examination, and completion of all lower division business administration core courses with grades of at least C in each course, or a grade of C or better in 301A. Provisions, legislative history and implications of the federal income tax.

#### 358 Principles of Taxation (3)

Prerequisites: Accounting 201A or instructor permission. The federal tax system, federal income taxation relating to federal tax system, federal income taxation relating to individuals, corporations, partnerships, and fiduciaries. Federal estate and gift taxes. Not open to accounting majors.

401 Advanced Accounting (3)

Prerequisite: Accounting 301B with a grade of C or better. Business combinations; meaning, usefulness and methodology of consolidated financial statements; investments in non-subsidiary affiliates and corporate joint ventures; consolidated financial statements for overseas units of U.S.-based multinational companies; translations of foreign currencies.

402 Auditing (3)

Prerequisites: Accounting 301B and 302 with a grade of C or better. The auditing standards and procedures used by financial and operational auditors. Management information and computer systems, internal control, audit evidence, professional responsibilities and legal liabilities, standards of reporting financial information.

#### 407 Accounting Information Systems (3)

Prerequisites: Accounting 301A and 302 with a grade of C or better and Management Science 265 or equivalent. Alternative accounting systems used for the collection, organization and presentation of information. Theory and practice of information processing: organizational, behavioral and mechanical.

#### 408 Problems in Taxation (3)

Prerequisite: Accounting 308 with a grade of C or better. Federal income tax as it applies to corporations, partnerships, fiduciaries, and federal estate and gift taxes as they apply to taxable transfers.

#### 470 Tax Research, Practice and Procedures (3)

Prerequisite: Accounting 308 with a grade of C or better. The methodology of tax research including case studies; the management of a tax practice; administration procedures governing tax controversies; rights and obligations of taxpayers and tax practitioners.

495 Internship (1-3)

Prerequisites: Accounting 301B (may be taken concurrently), Accounting 302, a major in accounting, consent of the department internship adviser, and at least junior standing, 2.5 GPA and one semester in residence at the university. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No Credit only.

499 Independent Study (1-3)

Prerequisites: senior standing and approval of department chair. Open to qualified undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

502 Seminar in Accounting Theory (3)

Prerequisites: Accounting 301B, classified SBAE status and consent of instructor. The effects of professional, governmental, business, and social forces on the evolution of accounting theory.

503 Seminar in Contemporary Accounting Problems (3)

Prerequisite: classified M.S. in Accounting status or consent of instructor. Current issues in financial reporting including pronouncements by the Financial Accounting Standards Board and the Securities and Exchange Commission. Coverage of topics will change as new issues in accounting emerge.

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Prerequisites: Accounting 402 and classified SBAE status. Auditing theory and practices; professional ethics; auditing standards; Securities and Exchange Commission and stock exchange regulations; auditor's legal liability; statement trends and techniques.

506 Seminar: Professional Accounting Communications (3)

Prerequisite: classified M.S. in Accounting status or consent of instructor. Compilation and composition of accounting reports and client presentations relating to accountants' working papers, client engagement letters, management advisory reports and prospectuses.

507 Seminar in Accounting Information Systems (3)

Prerequisite: Accounting 407, or equivalent with consent of instructor. Case studies of computer based accounting systems used by organizations such as universities, banks, industrial corporations and CPA firms. Emphasis on accounting information, reports and internal controls.

508 Seminar in Tax Planning (3)

Prerequisites: Accounting 308 and classified SBAE status, or consent of instructor. Substantive provisions of federal law; tax planning from a corporate viewpoint; case studies of the effect of federal tax law on business decisions.

510 Financial Accounting (3)

Prerequisite: classified SBAE status. Accumulation, organization, and interpretation of financial and quantitative data relevant to the activities of corporate business enterprise.

511 Seminar in Managerial Accounting (3)

Prerequisites: Accounting 201B or 510, consent of instructor and classified SBAE status. Accounting information for management decisions; elements of manufacturing, distribution and service costs; cost systems; standard costs; cost reports; cost analysis.

518 Seminar in International Accounting (3)

Prerequisites: Accounting 201B or 511 and classified SBAE status. Comparative analysis of accounting principles and practices outside the United States; international financial accounting standards; current problems of international financial reporting, accounting planning and control for international operations; multinational companies.

#### 521 Seminar in Administrative Accounting (3)

Prerequisites: Accounting 302 or 511; classified SBAE status and consent of instructor. Integrative aspects of accounting, financial, and quantitative data for managerial decision-making; long-term, short-term profit planning; budgetary control; cost analysis; financial analysis and planning; taxation; and transfer pricing.

#### 572 Seminar in Taxation of Corporations & Shareholders (3) Prerequisites: Accounting 308 and classified SBAE status, or consent of instructor. Federal taxation relating to corporations; organizing, distributions, liquidations and reorganizations.

#### 573 Seminar in Taxation of Property Transactions (3) Prerequisites: Accounting 308 and classified SBAE status, or consent of instructor. Federal taxation relating to sales, exchanges and other transfers.

# 574 Seminar in Taxation of International Business

Prerequisites: Accounting 308 and classified SBAE status, or consent of instructor. Federal taxation relating to U.S. citizens and corporations with foreign source income and of foreign persons with U.S. source income; planning for foreign operations.

# 575 Seminar in Estate, Gift, Inheritance Taxes and Estate

Prerequisites: Accounting 308 and classified SBAE status, or consent of instructor. Federal and California death taxes and the planning of personal estates.

#### 576 Seminar in State and Local Taxation (3)

Prerequisites: Accounting 308 and classified SBAE status, or consent of instructor. Application of interstate income allocations; multi-state tax compact; separate v. apportionment accounting; foreign country sourced income. Also, California taxes as applied to businesses and individuals.

#### 577 Seminar in Taxation of Employee Compensation (3)

Prerequisites: Accounting 308 and classified SBAE status, or consent of instructor. Federal taxation relating to employee compensation including pensions and profit sharing, stock options, ESOP's, IRA's, Keogh's, maximum tax 5-year averaging, death benefits, group term life, etc.

#### habadan v zahilidah lagak bina egitlidis 578 Seminar in Taxation of Partnerships (3)

Prerequisites: Accounting 308 and classified SBAE status, or consent of instructor. Federal taxation relating to partnerships, estates, trusts and other special entities.

#### 597 Project (3)

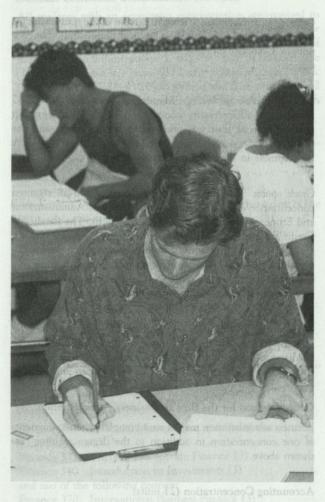
Prerequisite: classified SBAE status. Directed independent inquiry. Not open to students on academic probation.

#### 599 Independent Graduate Research (1-3)

Prerequisites: classified SBAE status, consent of instructor and approval of department chair and Associate Dean of Graduate Studies. May be repeated for credit. Not open to students on academic probation.

495 Internship (1-3)
Preneque use: Accounting 101B (may be caken concurrently)
Accounting 302, a major in accounting, source of the depart

# Business Administration Degrees



courses with a grade of at Reast C in each course and must receive

#### INTRODUCTION

This major prepares students for entry level positions in business. and administration in both the private and public sectors. Career opportunities range from accounting, cost analysis, marketing research and statistical forecasting to real estate, personnel, sales and information systems. This curriculum also provides a foundation for advanced study.

## BACHELOR OF ARTS IN BUSINESS **ADMINISTRATION**

#### Admission to the Business Administration Major

Admission to the Business Administration major involves two steps. Students who apply to the major are initially classified as Pre-business. After completing the lower-division core requirements with grades of at least "C", students may apply to the Business Administration major. Pre-business students may take lower-division business courses, but most upper-division courses are not open to Pre-business students.

All of the following requirements must be met for the degree. Students must earn a grade of at least C in each course listed below. A C average is acceptable in some concentrations. For assistance in interpreting these requirements contact the Business Advising Center.

### Required Lower-Division Core Courses

Business Admin 201 Business Writing (3) or Business Admin 201W Business Writing Workshop (3) Economics 201 Principles of Microeconomics (3) Economics 202 Principles of Macroeconomics (3)

(Note: Economics 210, Principles of Economics (5), may be substituted for Economics 201 and Economics 202.)

Math 135 Business Calculus (3)

or Math 130 A Short Course in Calculus (4)

or Math 150A Analytic Geometry and Calculus (4)

Accounting 201A Financial Accounting (3)

Accounting 201B Managerial Accounting (3)

Management 246 Business and Its Legal Environment (3)

Manag Sci 265 Introduction to Information Systems and Computer Programming (3)

#### Collateral Requirement

3-unit introductory social science course other than Economics, chosen from General Education section III.C.1.

#### English Proficiency Requirement

Cal State Fullerton Examination in Writing Proficiency (EWP)

#### Required Upper-Division Core Courses

Business administration majors shall not enroll in any required upper-division core course until they have completed all of the required lower-division core courses with a grade of at least C in each course. Students desiring to enroll in required upper-division core courses while concurrently completing the *last* of their required lower-division core courses may select only Economics 315, Intermediate Business Microeconomics (or Economics 310, Intermediate Microeconomics), and/or Management Science 361, Probability and Statistical Methods in Business and Economics.

## The following are required:

Econ 310 Intermediate Microeconomic Analysis (3)

or Econ 315 Intermediate Business Microeconomics (3)

or Econ 320 Intermediate Macroeconomic

Analysis (3)

Finance 320 Business Finance (3)

Management 339 Principals of Management & Operations (4)

Management 340 Organizational Behavior (3)

Manag Sci 361 Probability and Statistical Methods in

Business and Economics (4)

Manag Sci 362 Management Science Methods in Business

and Economics (3)

Marketing 351 Principles of Marketing (3)

#### Required Concentration Courses

A minimum of 18 units of course work is required in one concentration. See listing of concentration requirements below.

#### Required Capstone Core Course

After completing all lower and upper-division core courses, take:

Management 449 Seminar in Strategic Management (3)

#### Other Requirements, Grades and Residence

Global Awareness Requirement. Complete one course, of at least 3 units, in the area of Global Awareness. The course must be selected from the list of Approved Global Awareness Courses, which is available from the Business Advising Center.

Other subjects. Complete at least 50 percent of the coursework for the degree in subjects other than business administration or economics. Complete all university requirements for the bachelor's degree.

Grade-Point Average (GPA). Maintain at least a 2.0 GPA (C average) in all university courses and in the concentration courses. Earn at least a C grade in each core course and the concentration courses in Accounting and Marketing. A 2.0 GPA is acceptable in the other concentrations.

Grade option. Take all required core courses and all required concentration courses in the School of Business Administration and Economics for a letter grade (A,B,C,D,F). The Credit/No Credit grading option may not be used for these courses, and a grade of CR (credit) will not satisfy the requirements for the degree. Exception: Courses in calculus may be taken under the Credit/No Credit grading option, although courses taken to meet general education requirements must be taken for a letter grade.

Residence. At least nine units of courses in the area of concentration and at least 15 of the last 24 units of courses must be taken in residence at the School of Business Administration and Economics. Students also must fulfill university residence requirements.

#### Concentrations for the B.A. in Business Administration

Business administration majors must complete the requirements of one concentration in addition to the degree requirements shown above.

#### Accounting Concentration (21 units)

All students with an accounting concentration are required to take the courses shown below. Before taking these courses, students must first complete all of the required lower division core courses with a grade of at least C in each course and must receive a passing score on the Accounting Qualifying Exam. The examination must be passed during the two semesters prior to the semester of class enrollment.

Accounting 301A,B Intermediate Accounting (3,3)

Accounting 302 Cost Accounting (3)

Accounting 308 Concepts of Federal Income Tax Accounting (3)

Accounting 402 Auditing (3)

Accounting 407 Accounting Info Systems (3)

and one of the following courses:

Accounting 401 Advanced Accounting (3)

Accounting 408 Problems in Taxation (3)

Accounting 470 Tax Research, Practice and Procedures (3)

#### Business Economics Concentration (18 units)

All students with an economics concentration are required to take Econ 310 Intermediate Microeconomic Analysis (3) or Econ 315 Intermediate Business Microeconomics (3) as part of their business administration core requirements. In addition, the concentration requires Econ 320 Intermediate Macroeconomic Analysis (3) and Econ 410 Government and Business (3) and 12 units of upper-division economics electives, 3 units of which must be at the 400-level.

Students interested in economics also should consider the Bachelor of Arts in Economics.

#### Finance Concentration (18 units)

All students with a finance concentration must choose one of the following emphases:

Financial Institutions Emphasis (18 units)

Finance 331 Financial Management and Computer Applications (3)\*

Finance 332 Theory of Corporate Finance (3)

Finance 340 Introduction to Investments (3)

Finance 425 Commercial Bank and Financial Institution Management (3)

Finance 440 Money and Capital Markets (3)

and 3 units of upper division finance electives (other than Finance 310)

Financial Management Emphasis (18 units)

Finance 331 Financial Management and Computer Applications (3)\* Management department of the second of t

Finance 332 Theory of Corporate Finance (3)

Finance 340 Introduction to Investments (3)

and two of the following courses:

Finance 370 International Business Finance (3)

Finance 432 Financial Forecasting and Budgeting (3)

Finance 433 Problems in Business Finance (3)

and 3 units of upper division finance electives (other than Finance 310) January and Strathant Models (00 to 2 mension)

Investments and Financial Planning Emphasis (18 units)

Finance 331 Financial Management and Computer Applications (3)\*

Finance 332 Theory of Corporate Finance (3)

Finance 340 Introduction to Investments (3)

and three of the following courses:

Finance 360 Principles of Insurance (3)

Finance 410 Theory and Practice of Personal Financial

Planning (3)

Finance 442 Advanced Investment Analysis (3)

Finance 444 Options and Futures (3)

Finance 455 Real Estate Investment Analysis (3)

Note: To be eligible to sit for the Certified Financial Planner Examination, students must take all of the following: Finance 340, 360, 410, 411, 455, and Accounting 358.

Real Estate Emphasis (18 units)

Finance 331 Financial Management and Computer Applications (3)\*

Finance 332 Theory of Corporate Finance (3)

Finance 351 Real Estate and Urban Land Analysis (3)

Finance 452 Real Estate Finance (3)

Real Estate Valuation (3) Finance 453

and one of the following courses:

Finance 451 Real Estate/Land Use Law — Case Studies (3)

Finance 454 Real Estate and Urban Development (3)

Finance 455 Real Estate Investment Analysis (3)

Finance 456 Property Development and Real Estate Policy Analysis (3)

#### Management Concentration (18 units)

Students in the management concentration must choose one of the following emphases:

Entrepreneurial Management (18 units)

Management 343 Personnel Management 3)

or Management 443 Group Dynamics (3)

Management 345 Small Business Management (3) or Management 448 Seminar in Small Business Consulting

Management 347 Current Legal Issues in Management (3) Management 425 Productivity and Quality Management (3) and 6 units of elective course work from the following to be chosen in consultation with a departmental advisor:

Management 349 Law for Small Business (3)

Management 435 Servive Organizations and Operations (3)

Management 440 Emerging Issues in Management (3)

Management 441 Labor-Management Relations (3)

Management 443 Group Dynamics (3)

Management 444 Project Management (3)

General Management (18 units)

Management 343 Personnel Management (3)

or Management 443 Group Dynamics (3)

Management 347 Current Legal Issues in Management (3)

Management 425 Productivity and Quality Management (3)

Management 440 Emerging Issues in Management (3)

<sup>\*</sup>Finance 331L Financial Management Lab (1) is optional and is highly recommended for students enrolled in Finance 331

and 6 units of elective course work from the following to be chosen in consultation with a departmental advisor:

Management 344 Introduction to Management Information Systems (3)

Management 345 Small Business Management (3) or Management 448 Seminar in Small Business Consulting

Management 348 Business Law (3)

Law for Small Business (3) Management 349

Operations Systems Design (3) Management 421

Women in Management (3) Management 431

Management 433 Advanced Topics in Human Resources Management (3)

Management 435 Service Organizations and Operations (3)

Management 441 Labor-Management Relations (3)

Project Management (3) Management 444

## Human Resources Management (18 units)

Management 343 Personnel Management (3)

Management 347 Current Legal Issues in Management (3)

Management 425 Productivity and Quality Management (3)

Management 433 Advanced Topics in Human Resources Management (3)

Management 441 Labor Management Relations (3)

Management 443 Group Dynamics (3)

#### Operations Management (18 units)

Management 343 Personnel Management (3) or Management 443 Group Dynamics (3)

Management 347 Current Legal Issues in Management (3)

Management 421 Operations Systems Design (3)

Management 422 Production and Inventory Control (3)

Management 425 Productivity and Quality Managment (3) and one elective from the following chosen in consultation with a departmental advisor:

Management 345 Small Business Management (3) or Management 448 Seminar in Small Business Consulting

(E) (3) TENTIO LON SOUTH AND OF WHATE WELL THE MENTINGEN Management 410 Information Resources Management (3)

Management 435 Service Organizations and Operations (3)

Management 436 Government Contracts (3)

Management 440 Emerging Issues in Management (3)

Management 444 Project Management (3)

#### Management Information Systems Concentration (24 units)

All students with a Management Information Systems concentration are required to take: ( quest) EAA management w

Management 344 Introduction to Management Information Systems (3)

Management 454 MIS Analysis and Design (3)

Manag Sci 270 File Concepts and COBOL Programming (3)

Manag Sci 309 Elements of Information Systems Design (3) Manag Sci 365 Advanced BASIC Programming (3) or Manag Sci 370 Advanced COBOL Programming (3) Manag Sci 408 Database Management Systems (3) Manag Sci 409 Telecommunications and Business Applications (3)

One course selected from the following:

Management 410 Information Resources Management (3)

Manag Sci 365 Advanced BASIC Programming (3) or Manag Sci 370 Avanced COBOL Programming (3)

Manag Sci 411 Advanced Microcomputer Concepts and Applications (3)

Manag Sci 415 Decision Support and Expert Systems (3)

Manag Sci 418 Privacy and Security (3)

## Management Science Concentration (18 units)

All students with a management science concentration are required to take:

Manag Sci 440 Intermediate Management Science Models (3) (8) Same in the control of the c

Manag Sci 441 Intermediate Statistical Methods (3) and at least 12 units of upper-division management science electives chosen from the following: Linance (40 , Negres and Capital Madies (3)

Manag Sci 422 Surveys and Sampling Design and Applications (3)

Manag Sci 448 Computer Simulation in Business and Economics (3)

Manag Sci 461 Statistical Theory for Management Science Finance 332 p Theory of Corporate Finance (3) seeds (4)

Manag Sci 465 Linear Programming in Management Science

Manag Sci 467 Statistical Quality Control (3)

Manag Sci 472 Design of Experiments (3)

Manag Sci 473 Applied Statistical Forecasting (3)

Manag Sci 475 Multivariate Analysis (3)

Manag Sci 490 Queuing and Stochastic Models in Business and Economics (3)

# Marketing Concentration (18 units)

Required Courses (9 units)

Marketing 353 Marketing Analysis (3)

Marketing 370 Buyer Behavior (3)

Marketing 379 Marketing Research (3)

Electives (6 units)

Choose two from the following:

Professional Selling (3) Marketing 401

Marketing 405 Managing Advertising (3)

Managing the Sales Force (3) Marketing 415

Marketing 425 Retail Marketing Strategy (3) Marketing 435

Business Marketing Management (3) Marketing 445 Multinational Marketing Strategies (3)

Marketing 465 Managing Services Marketing (3)

Marketing 475 Export Marketing Strategies (3)

Capstone Course (3 units)

Marketing 489 Developing Marketing Strategies (3)

#### MINOR IN BUSINESS ADMINISTRATION

The minor provides a basic understanding of the role of business in society and the methods used by business. This curriculum also provides a basis for advanced study. A working knowledge of algebra is necessary for several of the required courses.

Business administration minors shall not enroll in any required upper-division course (in the minor) until they have completed all of the required lower-division courses (in the minor) with a grade of at least C in each course. Students must earn a grade of at least C in each course required for the minor.

#### Required Lower-Division Courses

Accounting 201A,B Accounting (3,3)

Economics 201 Principles of Microeconomics (3)

Economics 202 Principles of Macroeconomics (3)

or Economics 210 Principles of Economics (5) instead of

Econ 201 and Econ 202

Management 246 Business and Its Legal Environment (3)

Management Science 265 Introduction to Information

Systems and Computer Programing (3)

#### Required Upper-Division Courses

Special Notice: Enrollment in these courses requires the completion of all lower-division minor requirements with a grade of C or better in each course.

Finance 320 Business Finance (3)

Management 339 Principles of Management & Operations (4)

or Management 340 Organizational Behavior (3)

Marketing 351 Principles of Marketing (3)

Economics Majors Minoring in Business Administration: Economics Majors can complete a minor in business administration by taking Accounting 201B, Management 246, Finance 320, Management 339 or 340 and Marketing 351. All other required courses for the minor are required for the major in Economics.

#### MASTER OF BUSINESS ADMINISTRATION DEGREE

The M.B.A. degree program is accredited by the American Assembly of Collegiate Schools of Business. This assures a rigorous, indepth program, covering the full spectrum of business administration. Accreditation also indicates a well-qualified faculty, high standards for students, and access to computing and an extensive library system.

#### Programs of Study

The School of Business Administration and Economics offers two plans for the M.B.A. degree.

The M.B.A. Generalist Plan is designed for students with little or no course work in business administration. The curriculum surveys the entire field of business administration, preparing students for general management responsibilities.

The M.B.A. Specialist Plan is designed for students with recent course work (or an undergraduate degree) in business administration; or for those who wish to include a specialized area of concentration in their curriculum; and/or for those unable to follow the structure of the M.B.A. Generalist Plan. Some courses may be waived on the basis of equivalent undergraduate course work. The areas of concentration are accounting, business economics, finance, international business, management, management science and marketing.

The M.B.A. program is scheduled especially for students who are employed full time. Courses are offered during the late afternoon and evening. Most students enroll on a part-time basis, taking two courses (6 units) per semester.

Most graduate courses in the School of Business Administration and Economics require "classified SBAE status" and are open only to students with classified standing in the M.B.A., M.S. in Accountancy, M.S. in Management Science, M.S. in Taxation or M.A. in Economics programs.

#### Admission

Students meeting the following requirements will be admitted to postbaccalaureate-unclassified standing:

- 1. Acceptable bachelor's degree from an appropriately accredited institution, or equivalent.
- 2. Grade-point average of at least 2.5 in the last 60 semester units attempted and in good standing at last college attended.

Note: Postbaccalaureate-unclassified students may enroll in undergraduate courses (100 thru 400 level) but are generally ineligible for graduate business courses (500 level). Such students may wish to take undergraduate courses which are necessary to meet the requirements for classified standing (see below). Upon completing the requirements, the student may file an "Application for Change of Academic Objective-Graduate" requesting admission to the M.B.A. program. Admission to the university as a postbaccalaureate-unclassified student does not constitute admission to the M.B.A. program, does not confer priority, nor does it guarantee future admission. Students planning to apply for admission to the M.B.A. program should confer with the graduate adviser in the School of Business Administration and Economics.

Students meeting the following additional requirements will be admitted to the M.B.A. program with conditionally classified standing:

- 3. Admission into the MBA program is based upon an analysis of the following quantitative and qualitative considerations:
- A. A combination of GPA and Graduate Management Admission Test (GMAT) score, sufficient to yield a minimum score of 1000 according to one of the following formulas. Due to limited space, a higher minimum score is usually required of all applicants.
- 1. If overall undergraduate GPA is at least 2.5 and GMAT is at least 450, then score = (GPA x 200) + the structure of the M. B.A. Generalist Plan. TAMO surrous and
- 2. If overall undergraduate GPA is below 2.5 or GMAT is below 450, then score = (GPA x 200) + GMAT finance, international basiness, management, .00-general sci-
- B. A score in the top three-fourth's of both the Verbal and Quantitative areas of the GMAT.
- C. A minimum TOEFL score of 570 (international students and evening. Most suidents enroll on a per time. (vlno raking
- D. Review by the MBA admissions committee of the follow-Most graduate courses in the School of Daviness Adigni tradic
- 1. Academic preparation for graduate study
  - 2. Any prior work experience solmonood ni A.M so
  - 3. Two letters of reference
  - 4. A "Statement of Purpose" in pursuing the MBA, to be submitted by applicant

Note: Conditionally classified students may take a limited number of graduate courses (500 level), subject to the approval of the graduate adviser of the School of Business Administration and Economics. Students are expected to advance promptly to classified standing. In particular, any deficiencies in calculus or computer programming must be removed during the first 12 months of study. Students who do not do so will not be allowed to continue in the program, (OC) section seed and adultion to all

Students meeting the following additional requirements will be advanced to classified standing. Such students are eligible to take graduate courses for which they are qualified.

- 4. Proficiency in calculus and computer programming equivalent to passing Mathematics 135, Business Calculus (3 units), and Management Science 265, Introduction to Information Systems and Computer Programming (3 units), with grades of at least C. Students with work experience in these fields may demonstrate proficiency by passing a challenge examination and should consult the chair of the Management Science Department for details. A seminal 284 games and Marketing 445 Multimational Marketing Strategies (3).
- 5. Approval of study plan.

#### Curriculum — M.B.A./Generalist Plan

The M.B.A./Generalist curriculum includes 14-17 courses (42-51 units). Marketing 489 Developing Marketing Strategie

Any deficiencies in calculus or computer programming must be removed within one year. Any study plan course with a grade lower than C must be repeated with at least a C grade, regardless of the overall GPA of the student. A 3.0 GPA (B) is required in study plan courses and over all applicable course work.

Up to nine units of foundation courses may be waived on the basis of equivalent undergraduate course work providing the proposed courses are no more than seven years old and have at least a C grade with an overall 3.0 GPA (B). Courses waived beyond nine units must be replaced by an advanced course in the same discigrade of at least C in each course. Students must earn a gradenilq

#### Foundation Courses

Accounting 510 Financial Accounting (3) Financial Accounting (3) Business Admin 590 Strategic Management (3) Economics 515 The Price System and Resource Economics 201 Principles of Microeconomic (8) noisaollA

Finance 517 Managerial Finance (3) Managerial Finance

Management 516 Organizational Theory and Management of Operations (3) 101 most one 101 most

Management 518 Legal Environment of Business (3)

Manag Sci 513 Statistical Analysis (3)

Manag Sci 515 Management of Information in the Corporate Environment (3)

Marketing 519 Marketing Management (3) Trange Description

# Special Notice: Enrollment in these courses services Enrollment in the Service Services

All advanced courses must be at the graduate level.

Accounting 511 Seminar in Managerial Accounting (3) Economics 521 Macroeconomic Theory and Policy (3) Finance 523 Seminar in Corporate Financial Management or Management 340 Organizational Echavior (3) (6)

Management 524 | Seminar in Organizational Behavior and Administration (3)

Manag Sci 514 Decision Models for Business and Economics

Marketing 525 Seminar in Marketing Problems (3)
500-level elective chosen from any of the six SBAE departments on the minor are required for the major of the minor are required for the major of the major of the major of the minor are required for the major of Terminal Evaluation

Business Admin 591 Comprehensive Business (3) Complete the individual written project in Business Admin 591 with grade of "B" or better.

A comprehensive examination may serve as an option to the individual written project.

### Curriculum M.B.A./Specialist Plan

The M.B.A./Specialist curriculum includes a concentration in a specialized area and requires from 33 to 60 units of graduate course work. Students with a bachelor's degree in business administration may be able to complete the program with the minimum of 33 units. Students with little or no recent course work in business administration may require 60 units. Any deficiencies in calculus or computer programming must be removed within one year. Any study plan course with a grade lower than C must be repeated with at least a C grade, regardless of the overall GPA of the student. A 3.0 GPA (B) is required in study plan courses and over all applicable course work.

#### Foundation Courses

Foundation courses may be waived on the basis of equivalent undergraduate course work, providing that the equivalent courses are no more than seven years old and have grades of at least C with a GPA of at least B.

Accounting 510 Financial Accounting (3)

Business Admin 590 Strategic Management (3)

Economics 515 Price System & Resource Allocation (3)

Finance 517 Managerial Finance (3)

Management 516 Organizational Theory and Management of Operations (3)

Management 518 Legal Environment of Business (3)

Manag Sci 513 Statistical Analysis (3)

Manag Sci 514 Decision Models for Business and Economics (3)

Manag Sci 515 Management of Information in the Corporate Environment (3)

Marketing 519 Marketing Management (3)

A list of equivalent undergraduate courses is available from the graduate adviser. In many cases, students with a recent bachelor's degree in business administration from an accredited university will be able to waive all foundation courses.

#### Advanced Courses

All courses in this group must be taken at the graduate level. The Management Science seminar will be waived for students who have successfully completed both Management Science 513 and 514 (but not for students who have taken Management Science 361 and/or 362). Students with a concentration in international business are required to take only five of the following courses:

Accounting 511 Sem in Managerial Accounting (3)

Note: Students who have satisfactorily completed a course in cost accounting must substitute Accounting 521 Sem in Administrative Accounting (3).

Econ 521 Macroeconomic Theory and Policy (3)

Note: Economics 521 is not open to students with credit in intermediate macroeconomics. The bridge of more as

Finance 523 Seminar in Corporate Financial Mgmt (3) Management 524 Seminar in Organizational Behavior and

Administration (3) and rolling on asserted orle vem (sized) Manag Sci 526 Forecasting, Decision Analysis, and

Experimental Design (3) or Manag Sci 550 Special Topics on Information Systems Design and Data Communication (3)

or Manag Sci 560 Advanced Deterministic Models (3)

or Manag Sci 561 Advanced Probabilistic Models (3)

Marketing 525 Seminar in Marketing Problems (3)

Concentration Courses (except international business)

12 units in one of the following areas of concentration or if no concentration is desired, 12 units in a combination of courses from the following:

Accounting Business Economics Finance Marketing

Management Management Science

At least 6 units of the concentration courses must be taken at the 500-level. Concentration courses are to be approved by the department chair concerned, or designee within the department, and the Associate Dean, Graduate Studies, School of Business Administration and Economics. If no concentration is desired, the combination must be approved by the Associate Dean, Gradhours activity.) Students may not receive credit for seibut?

Note: The accounting concentration electives must cover the following areas: Financial Accounting and Theory, Accounting Information Systems, Auditing, and Taxation. At least nine units must be at the graduate level.

#### Concentration Courses International Business

Five of the following courses (15 units) are required, including at least 9 units at the graduate (500) level. (Note: students with an international business concentration take only five of the courses listed above under Advanced Courses.)

Accounting 518 Seminar in International Accounting (3)

Economics 531 International Economics (3)

Finance 570 Seminar in International Financial

Management (3)

Management 547 Comparative Management (3)

Marketing 445 Multinational Marketing Strategies (3)

Elective (3 units) to be approved by the international business advisor. Recommended electives include selected courses in History, Political Science, Communications, Geography and Chicano Studies.

Terminal Requirements

Business Admin 591 Comprehensive Business Management

Complete the individual project in Business Admin 591 with a grade of "B" or better. A comprehensive examination may serve as an option to the individual written project.

In exceptional cases, a thesis (Business Administration 598, Thesis) may also serve as an option for the comprehensive examination. See the graduate adviser for details.

# Business Administration Courses

201 Business Writing (3) (Formerly 301)

Prerequisite: English 101 or equivalent (with a grade of C or better). Principles of effective writing in business. Extensive practices in various forms of business writing. Case studies. Instructional fee. Students may not receive credit for both Bus Ad 201 and Bus Ad 201W.

201W Business Writing Workshop (3) (Formerly 301W)

Prerequisite: English 101 or equivalent (with a grade of C or better). Principles of effective writing in business. Extensive practice in various forms of business writing. Case studies. Uses word processing facilities in computer lab. (2 hours lecture: 2 hours activity.) Students may not receive credit for both Bus Ad 201 and Bus Ad 201W.

499 Independent Study (1-3)

Prerequisite: consent of instructor. Open to qualified students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

590 Strategic Management (3)

Prerequisites: classified M.B.A. status, within nine units of completing study plan. Focuses on importance of monitoring changes in environment(s) facing business and incorporating social, economic, and technological change into corporate decision-making process. Emphasizes use of analysis tools from other MBA classes with focus on data sources and methods for effective environmental scanning and emphasis on business ethics and social responsibility, international competitiveness, and changes in legal environment.

591 Comprehensive Business Management (3)

Prerequisites: classified SBAE status, within six units of completion of study plan and in final semester of program. Studies complex business problems and solutions. Builds skills in integrating knowledge from functional areas and applying them in an original and organized form to a range of business problems arising from changing technology, competitive market conditions, social changes, government actions. Includes article analysis, case analysis, a research project, individual and group reports and oral and written presentations. The individual project or an optional comprehensive exam will fulfill the terminal degree requirement.

598 Thesis (3) The six (3) The Prerequisites: classified SBAE status and consent of associate dean. Individual research under supervision. See "Theses and Projects" in this catalog for university requirements.



# Department of Economics

Department Chair: Anil Puri Director, Center for Economic Education: Morteza Rahmatian Department Office: Langsdorf Hall 702 Center for Economic Education: Langsdorf Hall 530

Programs Offered Medical Chine, allow as poverty chine.

Bachelor of Arts in Business Administration
Concentration in Business Economics

Bachelor of Arts in Economics

Minor in Economics Master of Business Administration

Concentration in Business Economics

Master of Arts in Economics

#### Faculty

Robert Ayanian, Victor Brajer, Kwang-wen Chu, James Dietz, Vincent Dropsy, Andrew Gill, Jane Hall, Walter Hettich, Stewart Long, Robert Michaels, Radha Murthy, Howard Naish, Anil Puri, Dipankar Purkayastha, Morteza Rahmatian, Eric Solberg, Murray Wolfson, David Wong

## Advisers

The Business Advising Center, Langsdorf Hall 700, provides information on admission, curriculum and graduation requirements; registration and grading procedures; residence and similar academic matters. In addition, all economics majors should see a faculty adviser in the Department of Economics for information on career opportunities and advanced study. Undergraduates should consult the department office for the name of their faculty adviser. Graduate students should consult the graduate coordinator, Walter Hettich.

# INTRODUCTION | and anoth addelines at safe, fine tendents

As a scholarly discipline, economics is over two centuries old, dating back to the French physiocrats and Adam Smith in the 18th century. The nature of economic analysis has been described by John Maynard Keynes as ". . . a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessors to draw correct conclusions." creity as a political design of the political and the political and the political design of the politi

Economic methods are used to study a basic question which faces all societies: how should limited resources be used to produce goods and how should that production be distributed? Not all wants can be satisfied because resources and knowledge are limited. Therefore, societies are faced with choices. These choices are made in different ways: by custom; by command and centralized control; or by a system of markets and prices as in our mixed economy. Economists examine alternative solutions to the basic economic problem by analyzing costs and benefits of changing existing patterns of resource use.

Economists work in many specialties including money and banking, international trade and finance, labor, public finance, industrial policy, business cycles and forecasting. Social issues and problems such as poverty, crime, discrimination, immigration, aging, energy, pollution and education are typical subjects of faculty research.

The faculty of the Economics Department participate in programs leading to both undergraduate and graduate degrees. One undergraduate program leads to a bachelor of arts degree with a major in economics, which focuses on economics as a social science. Another undergraduate program leads to a bachelor of arts degree with a major in business administration and a concentration in business economics and requires a larger number of business courses. Both programs prepare the student for a variety of career opportunities in business and government as well as advanced studies in economics, business, public administration and law. Graduate study is offered in economics, leading to a master of arts degree. Alternatively, students may follow the Master of Business Administration curriculum, with a concentration in business economics.

## Credential Information

For students interested in a teaching credential, the Department of Economics offers courses which may be included in the Multiple Subjects Waiver Program; the Single Subject Waiver Program in Business; and in the Supplementary Authorization Programs in Economics and in Economics and Consumer Education.

Further information on the requirements for teaching credentials is found in the Teaching Credential Programs section of this catalog and also is available from the Department Office for Elementary and Bilingual Education and for Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Admission to Teacher Education, Education Classroom 207.

#### Awards in Economics

The Norman Townshend-Zellner Award Wall Street Journal Student Achievement Award Outstanding Senior in Economics Outstanding Graduate Student in Economics Ford Foundation Baccalaureate Incentive Award

#### BACHELOR OF ARTS IN ECONOMICS

Admission to the Economics major involves two steps. Students who apply to the major are initially classified as Pre-economics. After completing the lower-division core requirements with grades of at least "C", students may apply to the Economics major. Pre-economics students may take lower-division business and economics courses, but most upper-division courses are not open to Pre-economics students.

All of the following requirements must be met for the degree. Students must earn a grade of at least C in each course listed below. However, a C average will be acceptable in the upper division economics electives. For assistance in interpreting these requirements contact the Business Advising Center, Langsdorf Hall 700. Students should also contact their faculty adviser in the Economics Department prior to or during their first semester.

#### Required Lower-Division Courses

Economics 201 Principles of Microeconomics (3) Economics 202 Principles of Macroeconomics (3)

Note: Economics 210, Principles of Economics (5), may be substituted for Economics 201 and 202.

Accounting 201A Financial Accounting (3) Bus Administration 201 Business Writing (3) or Bus Administration 201W Business Writing Workshop (3)

Math 135 Business Calculus (3)

or Math 130 A Short Course in Calculus (4)

or Math 150A Analytic Geometry and Calculus (4)

Economics 440 Introduction to Econometrics (3)

or Math 150B Analytic Geometry and Calculus (4)

or Accounting 201B Managerial Accounting (3)

Manag Sci 265 Introduction to Information Systems and Computer Programming (3)

#### English Proficiency Requirement

Cal State Fullerton Examination in Writing Proficiency (EWP).

#### Required Upper-Division Courses

Economics 310 Intermed Microeconomic Analysis (3)

Economics 320 Intermed Macroeconomic Analysis (3)

Manag Sci 361 Probability and Statistical Methods in

Business and Economics (4)

and 18 units of upper-division economics electives, 6 units of which must be 400 level. No more than 3 units of independent study may be used to meet the 400 level electives requirement.

# Other Requirements, Grades and Residence

Other Subjects. Complete at least 50 percent of the coursework for the degree outside the School of Business Administration and Economics. The department recommends that these courses be from the social sciences and mathematics. Students planning to do graduate work in economics are advised to take Math 150A, B; Economics 440 and Economics 441. Complete all university requirements for the bachelor's degree.

Grade-Point Average (GPA). Attain at least a 2.0 GPA (C average) in all university courses and in the upper division economics electives. Earn at least a C grade in each course required for the major (other than the upper division economics electives).

Grade Option. Take all required courses in economics, accounting and management science for a letter grade (A,B,C,D,F). The credit/no credit grading option may not be used for these courses, and a grade of CR (credit) will not satisfy the requirements for the degree. Exception: courses in calculus may be taken under the credit/no credit grading option, although courses taken to meet general education requirements must be taken for a letter grade.

Residence. At least 15 units of courses must be taken in residence at the School of Business Administration and Economics at Cal State Fullerton. Also fulfill university residence requirements.

## BACHELOR OF ARTS IN BUSINESS **ADMINISTRATION**

See "Business Administration, Business Economics Concentration."

## MINOR IN ECONOMICS

The economics minor covers the basics in the discipline of economics and gives students the opportunity to explore personal interests through electives. Note that a course in calculus (Math 135 or equivalent) is prerequisite to Economics 310 and 320. Students must earn a grade of at least C in each course listed below, landered mouteful bas memolyment youlog bas say

# Required Lower-Division Courses

Economics 201 Principles of Microeconomics (3) Economics 202 Principles of Macroeconomics (3)

Note: Economics 210, Principles of Economics (5), may be substituted for Economics 201 and Economics 202.

#### Required Upper-Division Courses

Economics 310 Inter Microeconomics Analysis (3) or Economics 315 Intermediate Business Microeconomics

Economics 320 Intermediate Macroeconomics Analysis (3) and 9 units of upper division economics electives

Note: Students with a major in business administration and a concentration other than economics, who wish to minor in economics, must take Economics 201 and 202 (or 210) and 310 as part of their major. For such students, these requirements in the minor will be waived and the minor will consist of Economics 320 and nine units of upper-division economics electives. Students with a major in business administration and a concentration in business economics may not also minor in economics.

#### MASTER OF BUSINESS ADMINISTRATION

See "Business Administration, Business Economics Concentration."

### MASTER OF ARTS IN ECONOMICS

This program provides preparation for professional careers in private industry and government and provides a foundation for further graduate work at the doctoral level. Full-time and parttime students can be accommodated. Most of the courses are scheduled in the evening.

The curriculum is designed for students with an undergraduate degree in business administration or economics, and consists of 10 courses (30 units). Provided that all prerequisites have been satisfied, the program may be completed in one year (full time) or 2½ years (part time).

The required courses progress from economic theory through economic model building and forecasting to the seminar in which the student prepares a thesis applying economic theory and econometric methods to a specific area of investigation. The curriculum also includes five courses (15 units) of electives.

Most graduate courses in the School of Business Administration and Economics require classified "SBAE status" and are open only to students with classified standing in the M.A. in Economics, M.B.A., M.S. in Management Science, or M.S. in Taxation programs.

#### Admission

Students meeting the following requirements will be admitted to postbaccalaureate-unclassified standing:

- 1. Acceptable bachelor's degree from appropriately accredited institution, or equivalent.
- 2. Grade-point average of at least 2.5 in the last 60 semester units attempted, and in good standing at last college attended.

Postbaccalaureate-unclassified students may enroll in undergraduate courses (100 thru 400 level) but are generally ineligible for graduate economics courses (500 level). Such students may wish to take undergraduate courses which are necessary to meet the requirements for classified standing (see below). Upon completing the requirements, the student may file an Application for Change of Academic Objective — Graduate requesting admission to the M.A. in Economics program. Admission to the university as a postbaccalaureate — unclassified student does not constitute admission to the program, does not confer priority, nor does it guarantee future admission. Students planning to apply for admission to the program should confer with the graduate adviser in the Department of Economics.

Students meeting the following additional requirements will be admitted with conditionally classified standing:

- 3. Overall undergraduate GPA of at least 2.5.
- 4. An average score of 500 on the Graduate Record Examination (G.R.E.). OFTA STEIN MICH SET VISUE TO RETEASE

Conditionally classified students may take a limited number of courses at the graduate level, subject to the approval of the graduate adviser of the Department of Economics. Students are expected to advance promptly to classified standing.

Students meeting the following additional requirements will be advanced to classified standing. Such students are eligible to take graduate courses for which they are qualified.

5. Completion of the following courses at Cal State Fullerton (or equivalent courses at other institutions) with a grade-point average of at least 3.0 (B average). The course in calculus must have a grade of at least C.

Economics 201 Principles of Microeconomics (3)

Economics 202 Principles of Macroeconomics (3)

Economics 310 Intermediate Microeconomic

Analysis (3)

Economics 320 Intermediate Macroeconomic

Analysis (3)

Economics 420 Money and Banking (3)

or three units of upper-division electives

Manag Sci 361 Probability and Statistical Methods in Business and Economics (4)

Mathematics 135 Business Calculus (3)

6. Approval of study plan.

#### Curriculum

Students are urged to meet as soon as possible with the graduate adviser in the Department of Economics to file a study plan and advance to classified standing.

Any study plan course in which a D grade is received must be repeated with at least a C grade, regardless of the overall gradepoint average of the student.

Required Core Courses (12 units)

Economics 440 Introduction to Econometrics (3)

Economics 441 Introduction to Mathematical Economics (3)

Economics 502 Advanced Microeconomic Analysis (3)

Economics 503 Advanced Macroeconomic Analysis (3)

Area & Elective Courses (15 units)

Area courses require nine units chosen from the student's field of interest. Coursework may focus on the following areas: (1) environmental and natural resource economics (Economics 416, 462, 590), (2) international economics and finance (Economics 411, 590), and (3) applied economic analysis involving course work related to industrial organization and labor (Economics 505, 410, 412, 413, 446) or the public sector (Economics 505, 416, 417, 420, 421).

Among field and elective courses, six units must be taken at the 500 level and at least six units must be in economics. The remaining units in the student's program can be chosen from course offerings in Economics or related areas of study.

Terminal Evaluation (3 units)

Economics 598 Thesis Research (3)

# Economics Courses

100 The Economic Environment (3)

The application of economics to the problems of unemployment and inflation, the distribution of income, competition and monopoly, the role of government in the economy, and other policy issues. Not open to prebusiness, business administration majors or minors, economics majors or minors, or international business majors.

201 Principles of Microeconomics (3)

Principles of individual consumer and producer decision-making in various market structures; the price system; market performance and government policy. (CAN ECON 4)

202 Principles of Macroeconomics (3)

Prerequisite: Economics 201. Principles of macroeconomic analysis and policy; unemployment and inflation; financial institutions; international trade; economic growth; comparative systems. (CAN ECON 2)

210 Principles of Economics (5) Prerequisite: Open only to junior transfers. (Duplicates 201 and 202.) Economic analysis and policy. The central problem of scarcity, economic institutions of the United States, resource allocation and income distribution, economic stability and growth, the role of public policy, and international applications.

310 Intermediate Microeconomic Analysis (3)

Prerequisites: Economics 202 or 210 and Mathematics 135; corequisite Management Science 361 or equivalent. Rational decision-making behavior of consumers and firms and price and output determination in markets. Primarily for Economics majors, but open to all students who qualify.

#### 315 Intermediate Business Microeconomics (3)

Prerequisites: Economics 202 or Economics 210 and Mathematics 135. Corequisite: Management Science 361 or equivalent. Analysis of business decisions in alternative market structures with special emphasis on problem solving in a business context using economic concepts and methods. Not open to Economics majors. Students may not receive credit for both Economics 310 and 315.

#### 320 Intermediate Macroeconomic Analysis (3)

Prerequisite: Economics 202 or 210 and Math 135; Corequisite: Management Science 361 or equivalent. The determinants of the level of national income, employment and prices, and monepolicies. (E-1) giramental 2004
Perequentus: economics major with Manag Sci 3 tary and fiscal policies.

# 330 Comparative Economic Systems (3)

Prerequisite: Economics 100 or 201 or 210. Alternative economic systems; their theoretical foundations, actual economic institutions, and achievements and failures. Contrast between socialist and capitalist systems.

## 331 The Soviet Economy (3)

Prerequisite: Economics 100 or 201 or 210. The structure and performance of the Soviet economy; the problems of allocating scarce resources and sustaining economic growth in a planned economy.

#### 332 Economies of the Pacific Rim (3)

Prerequisite: Economics 100 or 201 or 210. Dimensions of industrialization, agriculture, investment, human resources, and trade in economies of the Far East (including Japan and China), India, and related nations of the Pacific Rim.

#### 333 Economic Development: Analysis and Case Studies (3)

Prerequisite: Economics 100 or 201 or 210. The processes of economic growth with references to developing areas. Capital formation, resource allocation, relation to the world economy, economic planning and institutional factors, with case studies.

#### 334 Economics of Latin America and the Caribbean (3)

Prerequisite: Economics 100 or 201 or 210. Examines regional economic problems within an international context: dependence, industrialization and the international corporation; agriculture; regional cooperation; inflation; trade and debt problems. Major economic thinkers will be discussed.

#### 335 The International Economy (3)

Prerequisite: Economics 100 or 201 or 210. The theory, practice and institutions of the international economy. International trade and investment, balance of payments, foreign exchange rates, multi-national enterprise, international economic policy. Current trade issues: European Community, trade with developing countries, Eastern Europe, and the states of the former Soviet Union; General Agreement on Tariffs and Trade (GATT) and other major trade agreements.

# 350 American Economic History (3)

Prerequisite: Economics 100 or 201 or 210. The development of American economic institutions; economic problems, economic growth and economic welfare.

#### 351 European Economic History (3)

Prerequisite: Economics 100 or 201 or 210. The evolution of European economic institutions and their relation to the development of industry, commerce, transportation and finance in the principal European countries.

#### 361 Urban Economics (3)

Prerequisite: Economics 100 or 201 or 210. Theory and analysis of the urban economy, urban economic problems and policy.

## 362 Environmental Economics (3)

Prerequisite: Economics 100 or 201 or 210, or consent of instructor. Economic analysis of environmental problems and related issues: externalities, property rights, social costs and benefits, user cost, rent and decision making under uncertainty.

#### 363 The Economics of Energy (3)

Prerequisite: Economics 100 or 201 or 210. Economic theory applied to energy problems, the impact of energy development on economic structure, and the role of government in allocating energy resources and influencing their use.

#### 410 Government and Business (3)

Prerequisite: Economics 310 or equivalent. Business organization, conduct and performance; the rationale and impact of public policy on business and business activities, including the regulated industries, sick industries and antitrust policy.

#### 411 International Trade (3)

Prerequisite: Economics 310 or 315 or equivalent. The theory of international gains from free trade, effects of tariff and non-tariff barriers, and conduct of commercial policy. The balance of payments, the theories of exchange rate determination, and other international economic issues. The policy of the international economic issues.

#### 412 Labor Economics (3) treemed of endoangue organists base

Prerequisite: Economics 310 or equivalent. Labor supply and demand, labor force participation, employment, unemployment, human capital, wage differentials, disadvantaged labor market groups, discrimination and wage-related income transfers.

# 413 Law and Economics (3) 10 018 estimonood estimpered

Prerequisites: Economics 310 or 315. An economic analysis of the common law - property, contract, and tort - focusing on the use of microeconomic theory to study the economic efficiency characteristics and effects of these laws. An emphasis will be placed on the analysis of specific legal cases.

#### 416 Benefit Cost and Microeconomic Policy Analysis (3)

Prerequisites: Economics 310 or equivalent. Application of microeconomic models and welfare economics to public policy. Concepts of economic efficiency, economic surplus and equity. Measurement of policy effects, including benefit-cost analysis, with applications to selected policy areas such as education and environmental programs.

#### 417 Public Finance (3)

Prerequisite: Economics 310 or equivalent. Government finance at the federal, state and local levels; the impact of taxation and spending on resource allocation, income distribution, stabilization and growth.

## 420 Money and Banking (3)

Prerequisite: Economics 320 or equivalent. The money supply process and the impact of monetary policy on economic activity.

#### 421 Monetary and Fiscal Policy (3)

Prerequisite: Economics 320 or equivalent. The techniques of monetary and fiscal policy; of their relative roles in promoting economic stability and growth.

#### 431 International Macroeconomics and Growth (3)

Prerequisites: Economics 320. Macroeconomic analysis of the open economy: the impact of stabilization policies in a global economy, the role of the balance of payments, the international monetary system and growth in less developed countries.

#### 440 Introduction to Econometrics (3)

Prerequisites: Economics 202 (or 210), Manag Sci 361 or equivalent. Economic measurement: specification and estimation of econometric models; statistical methods in economic research.

#### 441 Introduction to Mathematical Economics (3)

Prerequisites: Economics 202 (or 210) and Math 135 or equivalent. Economic theory, from microeconomics and macroeconomics. Content varies; constrained optimization problems and rational decision-making.

## 442 Economics of Conflict and Defense (3)

Prerequisites: Economics 310 and 320 or equivalent. Economic and strategic approaches to domestic and international conflict, public goods, defense, arms competition, and arms control. The effects of U.S. defense spending on the U.S. and international economy. Game theory and other theories of strategic behavior.

#### 446 Managerial Economics (3)

Prerequisites: Economics 310 or 315, and Management Science 361. An application of microeconomic analysis and economic measurement to decision making at the individual firm level. The influence of the macroeconomic environment and market structure on the decisions of the firm. Applications and case studies.

#### 450 History of Economic Thought (3)

Prerequisites: Economics 310 or 320. Major schools of thought and of leading individual economists as they influenced economic thought and policy.

### 462 Natural Resource Economics (3)

Prerequisites: Economics 310 or 315 or equivalent. Concepts and principles in the application of economics to issues in natural resource economics. Issues will include uncertainty and risk in investment, depletion over time, cartelization, the role of technological innovation and government intervention related to fuels, water, land, etc.

#### 495 Internship (1-3)

Prerequisites: economics major with Manag Sci 361, Economics 310 (or 320) (or the equivalents) or international business major with Economics 202 and 335, Manag Sci 361 (or the equivalents); and consent of the department internship adviser, at least junior standing, 2.5 GPA and one semester in residence at the university. Planned and supervised work experience. May be repeated for a total of six units credit. Credit/No Credit grading only.

### 496 Student-to-Student Tutorial (1-3)

Prerequisites: economics major or concentration, Economics 310 and 320, senior standing, 3.0 GPA and consent of department chair. Student learns through teaching (tutoring) other students enrolled in principles and intermediate economics courses. Consult "Student-to-Student Tutorials" in this catalog for more information. May not be used to satisfy the elective requirements for the major or concentration in economics. Credit/No Credit grading only.

## 499 Independent Study (1-3)

Prerequisites: economics major or concentration, Economics 310 and 320 (or the equivalents), senior or graduate standing, and consent of instructor and department chair. Directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

# 502 Advanced Microeconomic Analysis (3)

Prerequisites: Economics 310 and classified SBAE status or consent of instructor. An advanced treatment of rational decision-making behavior of consumers and firms, the price system, and resource allocation in partial and general equilibrium settings. Topics include preference theory, welfare economics, gains from trade, monopoly power, external costs and benefits, public goods, factor markets, intertemporal decisions, risk and uncertainty.

### 503 Advanced Macroeconomic Analysis (3)

Prerequisites: Economics 320 and classified SBAE status or consent of instructor. The determination of employment, fluctuations of real and money income, and the forces underlying economic growth.

#### 505 Economic Models and Forecasting (3)

Prerequisites: Economics 440 and classified SBAE status or consent of the instructor. Statistical methods of econometric estimation and forecasting. Practical solutions to problems in model specification, estimation by regression, time series analysis and forecasting.

#### 515 The Price System and Resource Allocation (3)

Prerequisites: classified SBAE status and Math 135 or the equivalent. Microeconomic analysis and policy under mixed capitalism. The economic environment and institutions, markets, consumer choice, production and resource allocation. Monopoly power and government intervention. (Not open to M.A. Economic candidates.)

#### 516 Economics and Benefit-Cost Analysis (3)

Prerequisites: Economics 201 (or 210) and classified graduate status in environmental studies or public administration. Economics and benefit-cost analysis of public projects. Consumer demand and the estimation of benefits; the nature of cost in a market economy; price controls, unemployment and inflation; and criteria for choice, for multi-year projects. For elective credit in the M.S. Environmental Studies or M.P.A.

#### 517 Economics of Public Finance (3)

Prerequisite: Economics 515 (or 516) and classified graduate status in environmental studies, public administration, business administration, or taxation. Economics of federal, state and local governmental spending, taxation and borrowing. Major taxes, their effects on market prices, income distribution, employment and inflation, and evaluation of reform proposals. (For elective credit in the M.S. Environmental Studies, M.P.A., M.B.A., or M.S. Taxation.)

#### 521 Macroeconomic Theory and Policy (3)

Prerequisites: Economics 310 or 515 and classified SBAE status. National income determination and macroeconomic models. Inflation and unemployment. Monetary and fiscal policies. International trade and foreign exchange (Not open to M.A. Economics candidates or students with credit for Economics 320.)

#### 522 Comparative Economics Seminar (3)

Prerequisites: Economics 515 or 310 and classified SBAE status. Analytical and prescriptive approaches to economic problems of scarcity, development, fiscal and monetary policy, planning and poverty. (Not open to M.A. Economics candidates.)

#### 531 International Economics (3)

Prerequisites: Economics 310 or 315 or 515; Economics 320 or 521. An introductory analysis of theories and current issues in international trade, finance, macroeconomics and growth, with an emphasis on business applications.

#### 590 Topics in Economic Analysis and Policy (3)

Prerequisites: Economics 310 and 320; classified SBAE status or consent of instructor. Contemporary research in areas such as: resource economics; history of economic thought; international monetary systems; forecasting; economics of planning; human resource economics. May be repeated for credit.

#### 595 Current Research in Economics (3)

Prerequisite: classified graduate status in Economics or Economics 440, a 3.25 or better grade-point average and permission of the instructor. Students attend the departmental research seminar where faculty and outside speakers present papers dealing with recent and ongoing research. Students read material relevant to presentations and write analytical reports covering five seminar meetings. May be repeated once for credit.

#### 597 Project (3)

Open to qualified graduate students. Directed independent inquiry. Not open to students on academic probation.

#### 598 Thesis Research (3)

Prerequisites: Economics 502, 503 and classified SBAE status. Corequisite: Economics 505. Selection and approval of topic; outline; methodology; literature survey; data collection and analvsis; presentation of results. Award of the grade is contingent upon the completion and acceptance of the thesis.

#### 599 Independent Graduate Research (1-3)

Prerequisites: Economics 440, 502 and 503; classified graduate status; and consent of instructor and department chair (or designee). Directed advanced independent inquiry. May be repeated for credit. Not open to students on academic probation.

# Department of Finance

Department Chair: John Emery Department Office: Langsdorf Hall 556

Programs Offered Bachelor of Arts in Business Administration

Concentration in Finance

Master of Business Administration

Concentration in Finance

#### Faculty

Albert Bueso, Su Chan, Carolyn Chang, Donald Crane, John Emery, John Erickson, Albert J. Fredman, Tsong Lai, Daniel Lee, Yuming Li, Dennis O'Connor, Robert Plattner, P. James Stickels, Richard Stolz, Marco Tonietti, Ko Wang

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The Business Advising Center, Langsdorf Hall 700, provides information on admissions, curriculum and graduation requirements, registration and grading procedures, residence and similar academic matters. In addition, advising on curriculum content and career opportunities may be obtained from the chair of the Finance Department or from:

Financial Management Marco Tonietti Personal Financial Planning Donald Crane Real Estate Robert Plattner Securities and Investments Albert Fredman Financial Institutions John Emery

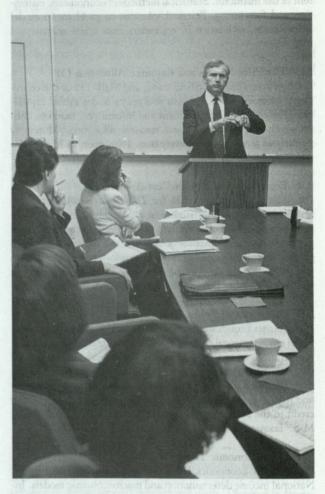
# INTRODUCTION Street Str

Finance is the study of the methods by which a firm provides itself with cash to run its daily operations and its long-range expansion.

In choosing their course work students may elect one of four areas of emphasis within the finance concentration of the major in business administration: financial management; financial institutions; investments and financial planning; and real estate. A financial management emphasis may lead to employment in a bank or savings and loan association. An investment and financial planning emphasis may lead to employment in a brokerage firm or a financial planning firm. A real estate emphasis may lead to employment in the real estate industry.

#### Credential Information

For students interested in a teaching credential, the Department of Finance offers courses which may be included in the Single Subject Waiver Program in Business and in the Supplementary Authorization Program in Economics and Consumer Education.



Further information on the requirements for teaching credentials is found in the Teaching Credential Programs section of this catalog and is also available from the Department Office for Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Admission to Teacher Education.

# Awards in Finance

The Wall Street Journal Award
Edward D'Cunha Finance Award
Financial Management Association Award
Investment Trust Award
Jack Nichols Scholarship Award
Outstanding Finance Student Award
Outstanding Service Award
Peter M. Mlynaryk Outstanding Real Estate Award

# BACHELOR OF ARTS IN BUSINESS

See "Business Administration, Finance Concentration."

## MASTER OF BUSINESS ADMINISTRATION

See "Business Administration, Finance Concentration."

# **Finance Courses**

#### 310 Personal Financial Management (3)

Financial problems of the household in allocating resources and planning expenditures. Housing, insurance, installment buying, medical care, savings and investments. (May not be used to fulfill the concentration requirement in finance.)

to international business majors. Planned and supervised work experience. May be repeated for credit up to a total of six units

# 320 Business Finance (3) bas Old galamoooA sental person

Prerequisite: Accounting 201B; corequisite: Management Science 361. Financing business enterprises; financial planning and control; analysis of alternative sources and uses of combinations of short-, intermediate- and long-term debt and equity. Cost of capital. Study of capital investment decisions; capital budget analysis and valuation; working capital and capital structure management; relative impact on the international environment of financial decisions.

#### 331 Financial Management and Computer Applications (3)

Prerequisite: Finance 320. Analysis of working capital management and policy. Use of available software programs and financial models in computer-aided analysis of working capital management, financial forecasting, financial planning, capital budgeting, leasing problems, investments and other financial issues.

#### 331L Financial Management Lab (1)

Corequisite: Finance 331. Laboratory in computer assisted financial analysis.

#### 332 Theory of Corporate Finance (3)

Prerequisite: Finance 331 (may be taken concurrently). Risk and return analysis. An introduction to the capital asset and arbitrage pricing models. Analysis of capital budgeting, capital structure, dividend policy, leasing, mergers and divestitures.

# 340 Introduction to Investments (3)

Prerequisite: Finance 331 (may be taken concurrently). Institutional characteristics of securities markets, security valuation and trading methods, fundamental and technical analysis, selection and management of securities, introduction to the capital asset pricing model, role of options and futures markets, portfolio analysis and mutual funds.

#### 351 Real Estate and Urban Land Analysis (3)

Prerequisite: Finance 320 or consent of instructor. Real estate principles, practices and investment decisions. Equity investment, finance, legal aspects, practices, principles, property development, real estate administration in the public sector, real estate market analysis, valuation.

# 360 Principles of Insurance (3) The Third base MAAD only

Prerequisite: junior or senior status. Life, casualty and liability insurance, individual and group insurance programs; methods of establishing risks and rates.

### 370 International Business Finance (3)

Prerequisite: Finance 320 or consent of instructor. Financing problems of international business. The international financial environment, taxation of foreign income, international capital and money markets, problems of risk in foreign investments, and financial techniques for the operation of a multinational firm.

#### 410 Theory & Practice of Personal Financial Planning (3)

Prerequisite: Finance 320. Developing, implementing and monitoring comprehensive personal financial plans. Includes risk management, investments, taxation, retirement and estate planning, as well as professional practices.

#### 411 Retirement and Estate Planning (3)

Prerequisite: Finance 320. Development of retirement objectives, needs and financial condition. Forecasting retirement income from employer based retirement plans, IRAs, insurance policies, social security, investment programs. Medicare, medical, group life and health benefits after retirement. Property titling, wills and transfers in contemplation of death.

# 425 Commercial Bank and Financial Institution Management (3)

Prerequisite: Finance 320. The solution of financial institution problems. Major financial intermediaries and the decision-making problems they face. Regulation and its effect on management operations. Group problems and case studies.

#### 432 Financial Forecasting and Budgeting (3)

Prerequisite: Finance 331. Forecasting in financial management; construction and interpretation of economic forecasts for the economy, industry and the firm; construction and interpretation of financial plans; evaluation of capital acquisition decisions under certainty and uncertainty conditions.

#### 433 Problems in Business Finance (3)

Prerequisite: Finance 332. Case studies. Group problems of estimating funds requirements, long-term financial planning, controlling and evaluating cash flows, and financing acquisitions and mergers, capital budgeting, and cost of capital. Group problems and case studies.

#### 440 Capital and Money Markets (3)

Prerequisite: Finance 320. Capital and money markets in the American economy; markets for new corporate and government issues; secondary markets; interrelation of financial institutions; factors influencing yields and security prices.

#### 442 Advanced Investment Analysis (3)

Prerequisites: Finance 340 and Management Science 361. Securities markets and company analysis, security valuation models the CAPM and the APT option pricing, and portfolio models. Practical application of investment theory and recent literature will be emphasized.

#### 444 Options and Futures (3)

Prerequisite: Finance 340. Put and call options, option pricing theory and models. Financial futures pricing, hedging strategies and models. Institutional characteristics of futures trading. Options and futures on stock indices. Options on futures, theoretical relationship between options and futures.

#### 451 Real Estate/Land Use Law — Case Studies (3)

Prerequisite: Finance 351. Real estate law. Cases provide illustrations of specific legal situations; financial institutions, property rights, zoning, land use law and environmental impact requirements.

## 452 Real Estate Finance (3)

Prerequisite: Finance 351. Financial institutions and real estate credit. Sources and uses of capital (funds) in financing real estate transactions. Money and capital markets and their effect on credit availability. Instruments in real estate finance. Investment methods and decisions. Group problems and case studies.

#### 453 Real Estate Valuation (3)

Prerequisite: Finance 351. Real property value, historical evolution of valuation principles, approaches in urban and real property appraisals, alternative methods and techniques for property valuation. The problem is effect on a state of the value of the state of the value of the value

#### 454 Real Estate and Urban Development (3)

Prerequisite: Finance 351. Factors and influences of urban growth and development. Economic factors and real estate supply and demand. Location theory and urban growth patterns. Public policy as a factor in real estate development. Analysis of real estate markets.

#### 455 Real Estate Investment Analysis (3)

Prerequisite: Finance 351. Alternative analytical techniques in evaluating real estate investments. Tax aspects, measurement of investment returns, application of computer models to investment decisions. Lecture, discussion and case analysis of major investment types - raw land, apartment houses, commercial and industrial uses.

#### 456 Property Development and Real Estate Policy Analysis (3)

Prerequisite: Finance 351. Decision making process in the property development process — from raw land to retail marketing of completed product. Policy formulation and implementation, project feasibility analysis, financial analysis, computer assisted analysis; case studies.

#### 495 Internship (1-3)

Prerequisites: Finance 331 or 332, a concentration in finance, consent of department internship adviser, junior standing, 2.5 GPA and one semester in residence at the university. Also open to international business majors. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No Credit only.

#### 499 Independent Study (1-3)

Prerequisites: senior standing and approval by department chair. Open to undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

#### 517 Managerial Finance (3)

Prerequisites: Accounting 510 and classified SBAE status. The methodology of financial management. The primary tools for financial analysis, long-term investment decisions, valuation and working capital management. International applications.

#### 523 Seminar in Corporate Financial Management (3)

Prerequisites: Finance 517 and classified SBAE status. The analysis of the financial decision-making process through case studies and seminar presentations. Current financial theory and models. International applications.

## 533 Seminar in Financial Administration (3)

Prerequisites: Finance 523 and classified SBAE status. Optimal financing and asset administration; advanced techniques of capital budgeting; application of analytical methods to the administration of the finance function of the business firm.

#### 540 Seminar in Financial Markets (3)

Prerequisites: Finance 517 or equivalent and classified SBAE status. Structure and operation of major financial institutions; portfolio composition, price-cost problems, and market behavior; analysis of financial intermediation and interrelation of financial institutions and markets.

#### 541 Seminar in Investment Management (3)

Prerequisites: Finance 517 or equivalent and classified SBAE status. Problems of investment and portfolio management; concepts of risk evaluation and investment criteria; analysis of interest rate movements; investment valuation and timing; regulation and administrative problems of the industry.

#### 551 Seminar in Real Estate Investment (3)

Prerequisites: Finance 517 or equivalent and classified SBAE status. Problems of real estate investment; concepts of evaluation and investment criteria; analysis of real property values; real estate development and financing. Case studies.

#### 570 Seminar in International Financial Management (3)

Prerequisites: Finance 517 or consent of instructor and classified SBAE status. The financial problems of the multinational firm. International financing instruments, capital investment decisions, and constraints on the profitability of multinational businesses.

#### 597 Project (3)

Prerequisite: classified SBAE status. Directed independent inquiry. Not open to students on academic probation.

#### 599 Independent Graduate Research (1-3)

Prerequisites: classified SBAE status, consent of instructor and approval of department chair and Associate Dean of Graduate Studies. May be repeated for credit. Not open to students on eng Chan (Management) inda Andersen (French) academic probation.

# International Business Program

Program Coordinator: Irene Lange Program Office: Langsdorf Hall 626

Program Offered

Bachelor of Arts in International Business

#### Program Council

Peng Chan (Management) Linda Andersen (French) Dennis O'Conner (Finance) Irene Lange (Marketing) Curtis Swanson (German) Vincent Dropsy (Economics) Marcial Prado (Spanish)

#### Advisers

The Business Advising Center, Langsdorf Hall 700, provides information on admissions, curriculum and graduation requirements, registration and grading procedures, residence and similar academic matters. Additional advising on curriculum content and career opportunities is available from the International Business Program:

International Business: Irene Lange French: Linda Andersen Curtis Swanson German: Nobuko Sugamoto Japanese: Portuguese: Ronald Harmon Spanish: Marcial Prado

#### INTRODUCTION

The international business curriculum covers the fundamentals of business administration, with an emphasis on international business. Foreign language courses are required and stress the use of the language in international business. The program also includes an internship with an international business. This curriculum prepares students for entry level positions in international business. Opportunities exist in contracts, distribution and sales and may lead to general management positions. Since Southern California is a major international business center, there are career opportunities with internationally oriented firms in this area. Other career opportunities may involve international travel or overseas assignments.

Language concentrations are offered in French, German, Japanese, Portuguese, and Spanish. Other concentrations may be developed in the future. The program is offered jointly by the School of Business Administration and Economics and the Department of Foreign Languages and Literatures.



# Scholarship In International Business

The Dennis Rippin-International Marketing Association Scholarship account a mi stame search to llorge live have at con-

### Preparation For The Major and the best series at resource and the series

Students who expect to complete this program in the usual fouryear period should realize that the total requirements, including general education courses and prerequisites, can exceed 124 semester units. Intermediate level competency in a foreign language, equivalent to courses numbered 204 in the Department of Foreign Languages and Literatures, is prerequisite to the required concentration courses. It is therefore strongly recommended that students complete a minimum of three years of foreign language study while in high school. Similarly, algebra and geometry are necessary for many required business courses. The equivalent of three years of high school mathematics, including a second course in algebra, is the prerequisite for the required Mathematics 135, Business Calculus. Students without the necessary background will need to enroll in Mathematics 115, College Algebra.

#### **BACHELOR OF ARTS IN INTERNATIONAL** BUSINESS

Admission to the International Business major involves two steps. Students who apply to the major are initially classified as Pre-international business. After completing the lower-division core requirements with grades of at least "C", and demonstrating satisfactory progress toward intermediate competency in a foreign language, students may apply to the International Business major. Pre-international business students may take lower-division business courses, but most upper-division courses are not open to Preinternational business students.

All of the following requirements must be met for the degree. Students must earn a grade of at least "C" in each course listed below. However, a "C" average will be acceptable in the required concentration courses. For assistance in interpreting these requirements, contact the Business Advising Center, Langsdorf Hall 700.

#### Required Lower-Division Core Courses

Business Admin 201 Business Writing (3) or Business Admin 201W Business Writing Workshop (3) Economics 201 Principles of Microeconomics (3) Economics 202 Principles of Macroeconomics (3)

Note: Economics 210, Principles of Economics (5), may be substituted for Economics 201 and 202.

Math 135 Business Calculus (3) bas (AOE1 to EE1, OE1 Hall) or Math 130 A Short Course in Calculus (4) or Math 150A Analytic Geometry and Calculus (4) Accounting 201A, B Accounting (3,3) Management 246 Business and Its Legal Environment (3) Manag Sci 265 Introduction to Information Systems and Computer Programming (3)

Intermediate competency in the appropriate foreign language is prerequisite to the required concentration courses. If necessary, students should enroll in French, German, Japanese or Spanish 101, 102, 203 and/or 204, or, for students with previous study of a romance language, Portuguese 101 and/or 102. Students may enroll at any point in this sequence of courses for which their previous study and/or experience have prepared them. Normally, two or three years of high school language study are counted as the equivalent of 10 units of college language study. Students should consult an adviser in the Department of Foreign Languages and Literatures before enrolling in their first foreign language course.

#### English Proficiency Requirement

Cal State Fullerton Examination in Writing Proficiency (EWP)

Business Administration 201 Business Writing (3) or Business Administration 201W Business Writing Workshop (3)

### Required Upper-Division Core Courses

International business majors shall not enroll in any required upper-division core course until they have completed all of the required lower-division core courses with a grade of at least "C" in each course. Students desiring to enroll in required upper-division core courses while concurrently completing the last of their required lower-division core courses may select only Economics 335 and/or Manag Sci 361.

Economics 335 International Economy (3)

Finance 320 Business Finance (3)

Finance 370 International Business Finance (3)

Management 339 Principles of Management & Operations (4)

Management 340 Organizational Behavior (3)

Manag Sci 361 Probability and Statistical Methods in

Business and Economics (4) and escuso gravollol add to ano

Marketing 351 Principles of Marketing (3)

Marketing 445 Multinational Marketing Strategies (3)

And a minimum of three units chosen from among the following electives. It is recommended that students take up to 12 units of electives, if possible. We seeming out in the page of the residence of the seeming of the seemin

Anthropology 412 Culture Change (3)

Anthropology 414 Economic Anthropology (3)

Comp Lit 465 The Novel in France and Germany (3)

Geography 333 Latin America (3)

Geography 336 Europe (3) and making sound did Lag 218

Geography 344 Africa (3)

Geography 360 Economic Geography (3)

History 350 History of Latin America Civilization (3)

History 429A Europe From 1890-1945 (3)

History 429B Europe Since 1945 (3)

History 453 Modern Mexico (3)

Philosophy 312 Business and Professional Ethics (3) Poli Sci 430T Government and Politics of a Selected Nation-State (3)\*

Poli Sci 431T Government and Politics of a Selected

Area (3)\*

Poli Sci 457 Politics of International Economics (3) Speech Comm 320 Intercultural Communication (3)

#### Required Concentration

(choose one of the following concentrations)

#### Concentration in French:

French 310 French in the Business World (3)

French 311 French for International Business (3)

French 315 Origins of Modern France (3)

French 325 Contemporary French Civilization (3)

## Concentration in German:

German 310 German in the Business World (3)

German 311 German for International Business (3)

German 315 Introduction to German Civilization (3)

German 325 Current Trends in Culture of German Speaking Peoples (3)

#### Concentration in Japanese:

Japanese 310 Japanese for Business (3)

Japanese 311 Japanese for International Business (3)

Japanese 315 Introduction to Japanese Civilization (3)

Japanese 316 Modern Japan (3)

#### Concentration in Portuguese:

Portuguese 310 Portuguese in the Business World (3)

Portuguese 317 Advanced Conversation and Composition (3)

Portuguese 320 Introduction to Luso-Brazilian Culture and

Civilization (3)

Portuguese 325 Contemporary Brazilian Civilization (3)

One of the following courses may be substituted for Portuguese 320 or 325:

Spanish 310 Spanish in the Business World (3)

Spanish 311 Spanish for International Business (3)

### Concentration in Spanish:

Spanish 310 Spanish in the Business World (3)

Spanish 311 Spanish for International Business (3)

Spanish 315 Introduction to Spanish Civilization (3)

Spanish 316 Intro to Spanish-American Civilization (3)

Note: Students may substitute one of the following for Spanish 315 or 316:

Spanish 415 Contemporary Spanish Culture (3)

Spanish 416 Contemp Spanish-American Culture (3)

#### Internship Requirement

Out-of-Country Internships: Students who successfully arrange an internship in a country where the language of their concentration is used, will enroll for three units in a language internship and for three units in a business internship. During this experience, students are expected to spend a minimum of four months in full-time employment with a faculty-approved firm. The firm should engage in international dealings where daily use of a foreign language is normal practice. Simultaneous enrollment in the two internships is expected and students normally will not engage in any other academic activity.

In-Country Internships: Students who complete internships locally, must arrange a business internship that involves international operations. In addition, these students must complete an additional pre-approved three-unit upper-division foreign language course. The course must increase students' understanding of the language and culture of their concentration. If students are expected to use their foreign language on a daily basis as part of their business internship work activity, students may complete a foreign language internship rather than the course. Approval for this option must be obtained prior to enrollment in the business internship and written evidence of language use must be provided at the completion of the language internship.

#### Internship Courses

Foreign Languages 495 Internship (3)

Economics 495 Internship (3)

Finance 495 Internship (3)

Management 495 Internship (3)

Management Science 495 Internship (3)

Marketing 495 Internship (3)

#### Required Capstone Core Course

After completing all lower- and upper-division core courses, take Management 480 Global Strategic Management (3)

#### Other Requirements

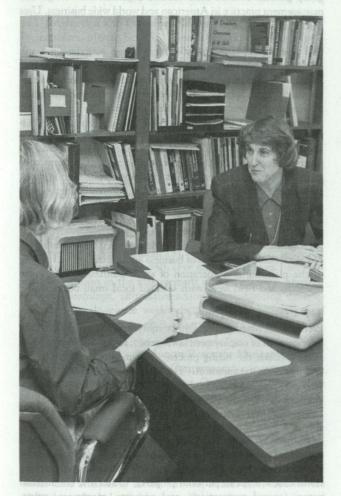
Other Subjects: Complete at least 50 percent of the coursework for the degree in subjects other than business administration or economics. Complete all university requirements for the bachelor's

Grade Point Average (GPA): Attain at least a 2.0 GPA (C average) in all university courses and in the concentration courses. Earn at least a C grade in each course required for the major (other than concentration courses).

Grade Options: Take all required core and concentration courses for a letter grade (A,B,C,D,F). The credit/no credit grading option may not be used for these courses, and a grade of CR (credit) will not satisfy the requirements of the degree. Exceptions: Calculus (Math 130, 135 or 150A) and Internship may be taken under the credit/no credit option, although courses taken to meet general education requirements must be taken for a letter grade.

Residence: At least 12 units of upper-division core courses, 6 units of upper-division concentration courses and 6 units of internships must be taken in residence at CSUF.

<sup>\*</sup>When topic is appropriate.



# Department of Management

Department Chair: Farouk H. Abdelwahed (Acting)
Department Office: Langsdorf Hall 640

Programs Offered The State of t

Bachelor of Arts in Business Administration

Concentration in Management

Master of Business Administration

Concentration in Management

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Farouk Abdelwahed, Michael Ames, Thomas Apke, Mei Liang Bickner, Peng Chan, Ellen Dumond, Carolyn Erdener, Gamini Gunawardane, Ghasem Haj-Manoochehri, Dorothy Heide, Richard Houston, Thomas Johnson, Brian Kleiner, Elliot Kushell, Thomas Mayes, Tai Oh, Goli Sadri, Hamid Tavakolian, Gustavo Vargas

#### Advisers

The Business Advising Center, Langsdorf Hall 700, provides information on admissions, curriculum and graduation requirements; registration and grading procedures; residence and similar academic matters. In addition, the Management Department provides advising on career opportunities and on the emphases within the Management Concentration:

Entrepreneurial Manag. General Manag. Human Resource Manag. Operations Manag. Michael Ames
Peng Chan
Thomas Johnson
Ellen Dumond

#### INTRODUCTION

Managers are needed in a wide variety of different types of organizations — business and nonbusiness, large and small, foreign and domestic. In all of these organizations, managers need technical, human and conceptual skills to help achieve organizational goals.

Management courses are designed to teach the fundamental principles underlying organizations, to emphasize education which will improve students' thought processes, to provide familiarity with the analytical tools of management, and to develop in the student an ability to use the techniques involved in analyzing and evaluating managerial problems and making sound decisions.

Students may pursue a wide variety of academic and career interests through four different emphases. These emphases include: (1) entrepreneurial management, (2) general management, (3) human resources management, and (4) operations management.

#### Credential Information

For students interested in a teaching credential, the Management Department offers courses which may be included in the Single Subject Waiver Program in Business and in the Supplementary Authorization Program in Economics and Consumer Education.

Further information on the requirements for teaching credentials is found in the Teaching Credential Programs section of this catalog and is also available from the Department of Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Admission to Teacher Education.

#### Awards in Management

The Gus Berger Award/Operations Management
The H. Peter Guertin/APICS Orange County Chapter
Scholarship

The Orange County Industrial Relations Research Association (OCIRRA)

The PERMA Scholarship

# BACHELOR OF ARTS IN BUSINESS ADMINISTRATION

See "Business Administration, Management Concentration."

#### MASTER OF BUSINESS ADMINISTRATION

See "Business Administration, Management Concentration".

# Management Courses

#### 246 Business and Its Legal Environment (3)

Examines laws and regulations affecting the business environment and managerial decisions including the legal system and methods of dispute resolution. Topics include torts, crimes, contracts, product liability, business organization, employment, antitrust, environmental protection; incorporates ethical considerations and international perspectives. Uses case studies.

#### 339 Principles of Management and Operations (4)

Prerequisites: all lower division business core courses or instructor's consent; corequisite Management Science 361. Administrative processes in utility-creating business operations: decision-making; planning; controlling; organizing; staffing; supporting business information systems; measuring and improving effectiveness; production processes, production operations and institutions in American and worldwide business. Uses the Production Lab.

#### 340 Organizational Behavior (3)

Prerequisites: general education in social sciences. Social and cultural environments of business; corequisite: Management Science 361. Business ethics. Communication, leadership, motivation, perception, personality development, group dynamics and group growth. Human behavior and organizational design and management practice in American and world wide business. Uses the Behavioral Lab.

#### 343 Personnel Management (3)

Prerequisite: Management 340 or equivalent. The personnel function, its activities, and its opportunities. Management's responsibilities for selection, development and effective utilization of personnel. Open to non-business majors.

#### 344 Introduction to Management Information Systems (3)

Prerequisite: Manag Sci 265, Management 339, Management 340. Organizational foundations of information systems, systems concepts, contemporary approaches to building information systems, managing information resources, issues in information technology management.

#### 345 Small Business Management (3)

Prerequisites: Accounting 201B, Management 339, Marketing 351. Practical applications of business administration techniques to the planning and operation of small businesses. Casework, research, and field work with selected local small businesses.

#### 347 Current Legal Issues (3)

Prerequisite: Management 246 or equivalent. Work and law; the development of employment law; agency; responsibilities of managing officers; the hiring process; discrimination; wages; hours and benefits; termination. The work environment, OSHA, worker's compensation. International and ethical implications of employment law. Patents, copyrights and trademarks. Product/service liability; environmental law.

#### 348 Business Law (3)

Prerequisite: Management 246 or equivalent. The philosophy, institutions and role of law in commercial and personal transactions: case studies in personal property, bailments, commercial paper, secured transactions, real property, mortgages, trusts, community property, wills, estate administration and insurance.

#### 349 Law for Small Business (3)

Prerequisite: Management 246. The philosophy, institutions, and role of law and their practical applications in the areas of interest to the small businessperson. Product liability, consumer rights, worker's compensation and other topics.

#### 410 Information Resources Management (3)

Prerequisite: Management 344. This course recognizes the expanding role of information systems in the overall strategy and management of organizations. The management of the organization information resources includes personnel, planning and control, technological trends, management implications, managing the MIS department.

#### 421 Operations Systems Design (3)

Prerequisites: Manag Sci 362. Managerial problems associated with designing an operations system, including product and process design, facilities planning, capacity choice, job design, automation, quality management and maintenance.

#### 422 Production and Inventory Control (3)

Prerequisites: Manag Sci 362. Planning and controlling of production activities and inventory levels. Identification of key problem areas. Presentation of applicable techniques and systems, and organizational and managerial concepts. Utilization of computer decision models.

#### 425 Productivity and Quality Management (3)

Prerequisites: Management 339 and Manag Sci 361 or equivalent. Definition, discussion and measurement of productivity and quality and their strategic role. Development of a comprehensive approach to managing and improving productivity and quality, including strategic, organizational, operational and technological aspects. Case studies on productivity and quality in service and manufacturing operations.

#### 431 Women in Management (3)

Prerequisite: Management 340. (For men and women.) Increasing participation in the management of organizations. Employment and earnings, affirmative action, understanding male-female and female-female work relationships, dual careers, and learning how to increase one's effectiveness in organizations.

#### 433 Advanced Topics in Human Resource Management (3)

Prerequisite: Management 343. Contemporary concepts and procedures in compensation and staffing. Current topics and controversial issues in human resource management are also covered.

#### 435 Service Organizations and Operations (3)

Prerequisite: Management 339. Analysis and applications of general management and operations management concepts to service organizations, and interactions among various functional areas. Case analyses of banks, airlines, health care, food service and others. Includes field trips and use of computer labs and models.

#### 436 Government Contracts (3)

Prerequisite: Management 246. Advertised and negotiated procurement and the role of contract manager. Fiscal and regulatory limitations. The nature of changes, disputes and termination. Contract terms and conditions and administration.

#### 440 Emerging Issues in Management (3)

Prerequisites: Management 339 and 340 or consent of instructor. For upper-division and graduate students. Business and management in America. The interrelationships of technological, economic, political and social forces with the business enterprises and their ethical obligations to owners, employees, consumers and society at large. Open to nonbusiness majors.

### 441 Labor-Management Relations (3)

Prerequisite: Management 340. Impact of labor-management relations upon labor, management, and the public. Proper grievance procedure, collective bargaining and settlement of disputes. Uses the Behavioral Lab.

#### 442 Grievance Handling and Arbitration (3)

Prerequisites: Management 441 or equivalent. In-depth study of the grievance procedures and the arbitration process and procedure in the private sector. Topics include discipline, contract interpretation, arbitrable issues, management right issues, such as subcontracting and employee rights. Uses cases and simulations.

#### 443 Group Dynamics (3)

Prerequisites: Management 339 and 340 or equivalent. Managerial skills in Group dynamics as they relate to team performance. Cultural diversity including value differences and perception. Leadership: problem solving, idea generation, communications and conflict management. Organization change and designs that enhance team effectiveness.

#### 444 Project Management (3) (8-1) ybar 2 trobasqobal 994

Prerequisites: management and management science core and other 300 level management courses in student's concentration. Technology for managing business and other enterprises as cybernetic systems. The design and control of systems appropriate for product, project and program levels of analysis. (2 hours lecture, 2 hours activity) Uses Production Lab.

#### 448 Seminar in Small Business Consulting (3)

Prerequisites: Management 339, Marketing 351 and senior standing. A seminar. Planning and working in a consulting relationship with small local businesses. Lectures, research and field work. (1 hour lecture, 6 hours field work)

### 449 Seminar in Strategic Management (3)

Prerequisites: all other School of Business Administration and Economics core courses and departmental approval. Integrative cases from top management viewpoint. Administrative processes, ethical-legal-economic implications of business decisions, international applications; organization theory and policy formulation. Individual and team efforts. Uses the Behavioral Lab.

#### 454 MIS Analysis and Design (3) moores oldsporology to assess

Prerequisites: Management 344, Manag Sci 408 and Manag Sci 409. Case-oriented seminar focusing on tools and techniques for systems analysis and design including communications structure and techniques, computer aided software, models and modelling, and project management; systems development life cycle and other types of systems development; strategic and administrative concepts and techniques.

### 480 Global Strategic Management (3)

Prerequisites: Completion of all other International Business core courses and departmental approval. This course deals primarily with the conceptualization, formulation, and implementation of successful global business strategies. Other topics include managing cultural differences, strategic alliances, and strategies for the Pacific Rim and Europe. (Uses the Behavioral

#### 490 Seminar in Management Information Systems (3)

Prerequisites: 300-level business core courses, Management 344, 444 (or 454), and Manag Sci 309. Senior seminar and applications in the design, implementation and use of management decision/information systems.

#### 495 Internship (1-3)

Prerequisites: six units of upper division management courses, including Management 339, major in management or international business, consent of department internship adviser and at least junior standing, 2.5 GPA and one semester in residence at the university. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No Credit only.

#### 499 Independent Study (1-3) (8) and magnifical 444

Prerequisites: management concentration, senior standing, and approval by faculty sponsor and department chair of proposed statement of work. Open to qualified students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

#### 516 Organizational Theory and Management of Operations (3)

Prerequisites: classified SBAE status, Manag Sci 514 (may be taken concurrently), Accounting 510, Economics 515. Modern organization theory and application in utility-creating operations. Interpersonal behavior, planning, control, organizing, directing, communication, production and information systems, and measures of effectiveness. International applications. Business ethics and relationships to society and politics. Graduate discussion and research reports.

#### 518 Legal Environment of Business (3)

Prerequisites: classified SBAE status. Law applicable to business institutions and inherent in business decisions with consideration of the ethical, social and political influences as they affect business organizations and operations both here and abroad; nature and sources of law, the judicial system and case studies in areas of enforceable agreements, products liability, employment, business organizations and trade regulation.

### 524 Seminar in Organizational Behavior & Administration (3) Prerequisites: classified SBAE status, Management 516 and 518

or equivalent. Human behavior in organizations, studies in organizational theories, and administrative action.

#### 535 Production/Operations Management (3)

Prerequisites: Management 516 and Management Science 514. An in-depth study of selected POM topics. Discussions of the operations function role and its importance, identification of the problem areas, and reviewing of the related concepts and techniques, including computer applications. Emphasizing the current POM topics of interest to top management.

#### 537 Management of Technology (3)

Prerequisite: Management 516. This course focuses on the role of technology in the competitive position of the organization. Covers technology forecasting, evaluation, selection and implementation as well as issues in technological risk management, technology transfer and research and development management.

#### 542 Seminar in Labor-Management Relations (3)

Prerequisites: classified SBAE status, Management 516 and 518. A seminar that focuses on various aspects of the labor-management relationship, issues in collective bargaining, the laws governing the relationship, contract administration, grievance handling, dispute settlement and arbitration. Negotiation simulation and case analyses.

#### 543 Seminar in Personnel Administration (3)

Prerequisites: classified SBAE status, Management 516 and 518, or equivalent. Cases, problems and significant personnel administration literature in personnel administration and human relations.

#### 547 Comparative Management (3)

Management practices and processes in five geographical areas; market-structures and management characteristics different from those in the United States. Constraints which vary between countries because of cultural, legal, economic and/or political differences.

### 599 Independent Graduate Research (1-3)

Prerequisites: classified SBAE status, consent of instructor, consent of department chair and Associate Dean Graduate Studies. May be repeated for credit. Not open to students on academic Presequints Management 146. Adventised and no noisadorq durement and me job of courtee manager Fiscal and me

# Management Information Systems



Coordinators: Department Chairs in Management and Management Science

Coordinator's Office: Langsdorf Hall 640 and 540

#### Programs Offered

Bachelor of Arts in Business Administration

Concentration in Management Information Systems

Minor in Management Information Systems

#### Advisers

The Business Advising Center, Langsdorf Hall 700, provides information on admissions, curriculum and graduation requirements; registration and grading procedures; residence and similar academic matters. In addition, advising about curriculum content and career opportunities is available from the coordinators listed above.

#### INTRODUCTION

Management information systems are computer based information systems. These systems aid management in making decisions and assist in implementing and controlling management policies. Management information systems are used in business, industry and government operations. Applications include airline reservations, banking transactions, crime prevention networks, election returns, real estate assessment, tax records, newspaper databases, sports statistics and computer assisted learning.

Management information systems incorporate the use of data processing equipment, such as computers and their peripherals. Computer software is used to create, maintain and retrieve information. Techniques include mathematical modeling and statistics, integrated with modern computer technology. These methods are applied to systems management, programming design, analysis of information flow, decision support, database organization, small business problems, data communication networking and distributed processing.

#### Awards in Management Information Systems

Outstanding Management Information Systems Undergraduate Award

# BACHELOR OF ARTS IN BUSINESS ADMINISTRATION

See "Business Administration, Management Information Systems Concentration."

# MINOR IN MANAGEMENT INFORMATION SYSTEMS\*

This minor surveys modern computer methods and the development of information-systems. Emphasis is placed on systems which aid management decision-making. Students must earn a grade of at least C in each course listed below.

Accounting 201A Financial Accounting (3)
Management 344 Introduction to Management Information
Systems (3)

Management Science 265 Introduction to Information Systems & Computer Programming (3)

Management Science 270 File Concepts and COBOL Programming (3)

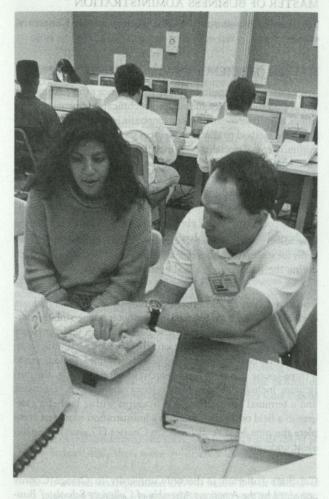
Management Science 309 Elements of Information System Design (3)

Management Science 408 Data Base Management Systems (3)

Note: Manag Sci 265, 270 and/or 408 may be waived for students who have taken these courses, or their equivalents, as part of their major. However, students must complete a minimum of 12 units for the minor, so that if all three courses are waived, 3 units of approved electives must be added. Recommended electives include Management Science 365, 370, 409, 411, 415 and 418.

<sup>\*</sup>Students with a major in business administration may not minor in management information systems. Such students should consult the Business Administration curriculum for concentration in management information systems.

# Department of Management Science



Department Chair: Zvi Drezner Department Office: Langsdorf Hall 540

#### Programs Offered

Bachelor of Arts in Business Administration

Concentration in Management Science

#### Master of Business Administration

Concentration in Management Science

#### Master of Science in Management Science

Concentration in Management Information Systems Concentration in Operations Research Concentration in Statistics

## Faculty Faculty Property and to more grown adjugate to

Shu-Jen Chen, Roger Dear, Zvi Drezner, Ben Edmondson, Nicholas Farnum, Zvi Goldstein, S. Hanizavareh, William Heitzman, Bhushan Kapoor, Mabel Kung, Bharat Lakhanpal, William Lau, John Lawrence, George Marcoulides, Do Le Minh, Barry Pasternack, Sorel Reisman, Herbert Rutemiller, Joseph Sherif, Sohan Sihota, Ram Singhania, LaVerne Stanton, Ronald Suich

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#### Advisers of estudent enablant of The hardware includes renugmon of the

The Business Advising Center, Langsdorf Hall 700, provides information on admissions, curriculum and graduation requirements; registration and grading procedures; residence and similar academic matters. In addition, the Management Science Department provides advising about curriculum content and career opportunities:

Graduate Program: Zvi Drezner, John Lawrence Statistics: George Marcoulides, Sohan Sihota, LaVerne Stanton, Ronald Suich

Information Systems: Mabel Kung, Bharat Lakhanpal, William Lau, Sorel Reisman, Ram Singhania

Operations Research: Roger Dear, Zvi Drezner, John Lawrence, Barry Pasternack

#### INTRODUCTION

Management Science is the application of the scientific method to decision-making in business and government. In practice, nearly all management science problems involve solutions using computers. Three of the major disciplines in management science are operations research, statistics and information systems. Operations research uses mathematical and simulation models to provide decision-makers with quantitative information pertaining to complex business situations. Statistics assists decision-makers by using techniques designed to draw inferences from experimental and sampling data. Information systems focus on the application of modern computer technology to provide accurate and relevant data to aid decision making.

Situations that require *operations research* techniques arise in all areas of business: accounting, finance, production, marketing, and research and development. Among the problems addressed by operations research techniques are the determination of inventory strategies, the allocation of scarce resources and the design of service systems. Others include bidding in competitive environments, selection of equipment replacement strategies and scheduling the completion of large projects.

The statistician is often involved in activities such as sales forecasting, quality control and financial analysis. *Statistics* is also concerned with model building and the design of experiments dealing with product testing, surveys and sampling.

Information systems is concerned with the management of large databases and the efficient reporting of timely information to decision makers. It relates to both the data processing hardware and the computer software. The hardware includes the computer and its peripheral equipment. The software is used to create, maintain and retrieve information. Information systems methods integrate mathematical modeling and statistics with modern information and computer technology. These methods are applied to systems management, analysis of information flow, and programming design.

#### Credential Information

For students interested in a teaching credential, the Department of Management Science offers courses which may be included in the Single Subject Waiver Program in Business.

Further information on the requirements for teaching credentials is found in the Teaching Credential Programs section of this catalog and is also available from the Department of Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Admission to Teacher Education, Education Classroom 207.

#### Awards in Management Science

David S. Stoller Outstanding Management Science Undergraduate Award

Outstanding Management Science Graduate Student Award

# BACHELOR OF ARTS IN BUSINESS

See "Business Administration, Management Science Concentra-

#### MASTER OF BUSINESS ADMINISTRATION

See "Business Administration, Management Science Concentra-

#### MASTER OF SCIENCE IN MANAGEMENT SCIENCE

The Master of Science in Management Science program provides the conceptual understanding and technical competence for a career in management science. Emphasis is placed on the use of scientific method to allocate resources so as to maximize profit or minimize cost. Specializations include operations research, management information systems and statistics. These techniques are widely used in both private business and public enterprise. Employment opportunities include positions such as management analyst, data processing manager, statistician and forecaster.

The M.S. in Management Science program is scheduled especially for students who are employed full time. Courses are offered during the late afternoon and evening.

The curriculum should appeal to students with undergraduate degrees in business administration, computer science, mathematics, engineering or science. For students with an undergraduate degree in business administration, the 10-course (30-unit) curriculum may be completed in 2½ years (part time). In addition to a three-course survey of management science methods, the curriculum includes management science applications, electives, and a terminal research project. Students with a bachelor's degree in a field other than business administration must first complete the nine M.B.A. Foundation Courses (27 units) or equivalent undergraduate courses.

Cal State Fullerton is the only university in Orange County accredited by the American Assembly of Collegiate Schools of Business. This assures a rigorous program, a well-qualified faculty, high standards for students, and access to an extensive library system. The qualifications of the M.S. in Management Science faculty include advanced degrees in operations research, statistics and applied mathematics; extensive computer experience; and practical experience in business, industry and government. Cal State Fullerton is the only campus within The California State University offering an M.S. in Management Science.

Most graduate courses in the School of Business Administration and Economics require "classified SBAE status" and are open only to students with classified standing in the M.S. in Management Science, M.S. in Taxation, M.A. in Economics, M.B.A. or M.S. in Accountancy programs.

Students meeting the following requirements will be admitted to postbaccalaureate unclassified standing:

- 1. Acceptable bachelor's degree from an institution accredited by a regional accrediting association, or equivalent.
- 2. Grade-point average of at least 2.5 in the last 60 semester units attempted and in good standing at last college attended.

Postbaccalaureate unclassified students may enroll in undergraduate courses (100 through 400 level) but are generally ineligible for graduate business courses (500 level). Such students may wish to take undergraduate courses which are necessary to meet the requirements for classified standing (see below). Upon completing the requirements, the student may file an "Application for Change of Academic Objective Graduate" requesting admission to the M.S. in Management Science program. Admission to the university as a postbaccalaureate unclassified student does not constitute admission to the M.S. in Management Science program, does not confer priority, nor does it guarantee future admission. Students planning to apply for admission to the M.S. in Management Science program should confer with the graduate adviser in the School of Business Administration and Economics.

Students meeting the following additional requirements will be admitted to the M.S. in Management Science program with conditionally classified standing:

- 3. Combination of grade-point average and score on the Graduate Management Admission Test (GMAT) sufficient to yield a score of at least 950 according to one of the following formulas. Due to limited facilities and resources in the School of Business Administration and Economics, a higher score may be required of all applicants.
  - A. If overall undergraduate GPA is at least 2.5 and GMAT is at least 450, then score =  $(GPA \times 200) + GMAT$ .
- B. If overall undergraduate GPA is below 2.5 or GMAT is below 450, then score =  $(GPA \times 200) + GMAT - 50$ .
  - C. If GPA is based on the last 60 semester units of course work, then score =  $(GPA \times 200) + GMAT - 100$ .

Conditionally classified students may take a limited number of graduate courses (500 level) subject to the approval of the graduate adviser of the School of Business Administration and Economics. Students may take whatever courses are necessary to fulfill requirement 4 (below) while enrolled as conditionally classified students. In addition, a maximum of 9 units (three courses) from the M.S. in Management Science curriculum may be taken while in conditionally classified standing.

Students meeting the following additional requirements will be advanced to classified standing. Such students are eligible to take graduate courses for which they are qualified. The graduate courses for which they are qualified.

- 4. A bachelor's degree with a major in business administration which meets the requirements stated in this catalog for such degrees. The degree must include calculus and computer programming equivalent to passing Mathematics 135, Business Calculus (3 units), and Management Science 265 Introduction to Information Systems and Computer Programming (3 units), with grades of at least C. Courses in the major are to be no more than seven years old, and must have at least a 3.0 GPA. Courses with grades lower than C must be repeated with at least a C grade. Applicants with a bachelor's degree in a field other than Business Administration may meet this requirement by passing the courses in calculus and computer programming (above) with grades of at least C, and also the Foundation Courses within the curriculum of the Master of Business Administration (27 units, including Accounting 510; Business Admin 590; Economics 515; Finance 517; Management 516, 518; Management Science 513, 515 and Marketing 519). The MBA Foundation Courses must have at least a 3.0 GPA; Foundation Courses with grades lower than a C must be repeated with at least a C grade.
- 5. Approval of study plan. In notice of memory man

#### Curriculum

The curriculum requires 30 semester units of course work beyond the baccalaureate degree. At least 18 of the 30 units required for the degree must be at the graduate level. A grade-point average of 3.0 (B) is required. Any study plan course in which a D is received must be repeated and must receive at least a C grade regardless of the overall GPA of the student.

The requirement for a concentration is to satisfactorily complete at least 15 units of courses (required and/or elective) in a specified field: Management Information Systems, Operations Research or Statistics. A concentration is not required for the degree.

#### Required Courses (9 units)

Manag Sci 526 Forecasting, Decision Analysis and Experimental Design (3)

Manag Sci 550 Special Topics on Information Systems Design and Data Communication (3)

Manag Sci 560 Advanced Deterministic Models (3) or Manag Sci 561 Advanced Probabilistic Models (3)

<sup>\*</sup>All work within any given quarter or semester must be included even though that will result in more than 60 semester units. The units to be included in the last 60 semester units may come only from the following: (1) work taken in postbaccalaureate status during the last seven years to be used to fulfill M.S. in Management Science course work requirements; (2) units taken under a prescribed remedial program agreed to by the Associate Dean, School of Business Administration and Economics; (3) units earned prior to the bachelor's degree.

#### Management Science Applications and Electives (18 units)

Courses to be selected in consultation with, and approved by, the student's adviser from the following:

Applications in Business and Economics (3 units)

Accounting 511 Seminar in Managerial Accounting (3)

Note: Students with credit for cost accounting may substitute
Accounting 521, Seminar in Administrative Accounting (3)

Economics 502 Adv. Microeconomic Analysis (3)
Finance 523 Seminar in Corporate Financial Management

Management 444 Project Management (3)

or Marketing 525 Seminar in Marketing Problems (3)

Electives (15 units)

Courses may be chosen from one or more of the following fields:

#### Operations Research:

A general approach to decision-making based on scientific method.

Manag Sci 465 Linear Programming in Management Science (3)

Manag Sci 490 Queueing and Stochastic Models in Management Science (3)

Manag Sci 560 Advanced Deterministic Models (3)

Manag Sci 561 Advanced Probabilistic Models (3)

#### Management Information Systems:

Computer methods for collecting, analyzing and reporting data to aid in management decision making.

Manag Sci 408 Data Base Management Systems (3) or Manag Sci 555 Data Structures and Data Base Management (3)

Manag Sci 409 Telecommunications and Business Applications (3)

Manag Sci 411 Advanced Microcomputer Concepts and Applications (3)

Manag Sci 415 Decision Support and Expert Systems (3)

Manag Sci 416 Computer Performance Evaluation (3)

Manag Sci 418 Privacy and Security (3)

#### Statistics:

Collecting, analyzing, and interpreting data.

Manag Sci 422 Surveys and Sampling Design and Applications (3)

Manag Sci 461 Statistical Theory for Management Science (4)

Manag Sci 467 Statistical Quality Control (3)

Manag Sci 472 Design of Experiments (3)

Manag Sci 473 Applied Statistical Forecasting (3)

Manag Sci 475 Multivariate Analysis (3)

Variable Topic:

Manag Sci 590 Seminar in Management Science (3)

#### Terminal Evaluation

Manag Sci 576 Business Modeling and Simulation (3)

Comprehensive Exam

# Management Science Courses

263 Introduction to Information Systems and Micro-Computer Applications (2)

Concepts of micro and mainframe computers and peripheral equipment; hardware and software concepts; representation of data; auxiliary storage and file organization; data communications. Hands-on examples of business applications in micro-computer classroom. Students may not receive credit for both Management Science 263 and 265.

# 265 Introduction to Information Systems and Computer Programming (3)

Introduction to information systems; computer organization and problem-solving concepts; computer programming in the BASIC language, including file processing; applications to business data processing. Micro computer applications and hands-on examples in a microcomputer classroom.

#### 265L Computer Programming Lab (1)

Corequisite: Management Science 265. Hands-on computer programming experience for common business problems using spread sheets, word processing, BASIC, data base management and graphics software.

#### 270 File Concepts and COBOL Programming (3)

Prerequisite: Management Science 264 or 265 or Computer Science 112 or equivalent. Structured COBOL; multiple-level table handling, subscripting and indexing; file organization documentation; report generation; sequential file updating.

#### 309 Elements of Information System Design (3)

Prerequisite: Management Science 270. Passing grade on MIS qualifying exam. Data management, operating systems, sorting and searching techniques, use of storage devices, interface equipment, random access and sequential titles, data structures; CO-BOL project required.

# 361 Probability and Statistical Methods in Business and Economics (4)

Prerequisites: Math 135 and Management Science 265 or equivalents. Probability concepts; expectations; descriptive statistics; discrete and continuous random variables; sampling; estimation; hypothesis testing; simple and multiple regression; time series; forecasting; nonparametric statistics.

#### 362 Management Science Methods in Business and Economics (3)

Prerequisite: Management Science 361 (may be taken concurrently). Mathematical methods and their application to business and economic problems, e.g., production control, scheduling, inventory control, PERT, decision and network analyses, simulation and queueing. Elementary mathematical optimization and production models.

365 Advanced BASIC Programming (3)

Prerequisite: Management Science 265. Advanced BASIC features: sequential and relative files, sorting and searching, error checking and business system design.

370 Advanced COBOL Programming (3)

Prerequisite: Management Science 270 or equivalent. Advanced COBOL features: Indexed and direct file processing, report writer, sort feature, declarative and linkage sections, segmentation. Overlay structure, survey of job control language, libraries. Direct access. Hardware devices.

408 Data Base Management Systems (3)

Prerequisites: Management Science 309. Integrated data base systems; logical organization; data description language (DDL); data manipulation language (DML); data independence; relational data bases; selected data base management systems (DBMS).

409 Telecommunications & Business Applications (3)

Prerequisite: Management Science 309. Communications design, concepts and hardware, telecommunications protocol, network architectures and configurations, LANs security and control, communication services, voice and electronic mail.

411 Advanced Microcomputer Concepts & Applications (3) Prerequisite: Management Science 365 or 370. This course focuses on contemporary issues in end user computing characterized by microcomputer work statistics. Current hardware/software trends will be analyzed within an industry and systems perspective.

415 Decision Support and Expert Systems (3)

Prerequisite: Management Science 309. Principles and procedures related to the design and use of expert systems and decision support systems principles in management decision making; development of expert systems using shells.

416 Computer Performance Evaluation (3) (Same as Computer Science 416) no ambura of nogo tel 4 va

418 Privacy and Security (3) The state of th

Corequisite: Management Science 309. Security and privacy problems associated with the use of computer systems; ways to minimize risks and losses.

#### 422 Surveys and Sampling Design and Applications (3)

Prerequisite: Management Science 361. Principles for designing business and economic surveys. Applications in accounting, marketing research, economic statistics and the social sciences. Sampling; simple random, stratified and multistage design; construction of sampling frames; detecting and controlling non-sampling errors.

#### 440 Intermediate Management Science Models (3)

Prerequisite: Management Science 362. Intermediate management science modeling and solution techniques, including topics in linear and non-linear programming, integer programming, dynamic programming, Markov processes, queueing theory, and inventory models. M at alaboth streethood bee galauoug 004

#### 441 Intermediate Statistical Methods (3)

Prerequisite: Management Science 362. Intermediate linear regression and topics in experimental design, quality control, time series analysis, forecasting, and statistical decision theory.

#### 448 Computer Simulation in Business and Economics (3)

Prerequisites: Management Science 264 and 361 (or equivalents) and Management Science 362. Computer generation of discrete and continuous random variables, their use in computer simulation. Applications include queueing, communications, computer systems, economics, gaming, inventory, scheduling and other management science topics.

#### 461 Statistical Theory for Management Science (4)

Prerequisite: Management Science 361. Review of mathematical topics needed for statistical theory. Distribution, theory, moment generating functions, central limit theorem. Estimation theory, maximum likelihood, least squares estimation. Hypothesis testing, Neyman-Pearson Lemma. Likelihood ratio tests. Use of statistical software packages.

#### 465 Linear Programming in Management Science (3) (Formerly 580)

Prerequisites: Management Science 362 or Mathematics 250B and Computer Science 112. Mathematical and theoretical foundations for linear programming; geometric and linear algebraic approaches and proofs; simplex method, duality, sensitivity and parametric analyses, extensions to specialized algorithms, and large scale models; practical and computer based applications will be discussed.

#### 467 Statistical Quality Control (3)

Prerequisite: Management Science 361. Control charts for variables, percent defective and defects. Tolerances, process capacity; special control charts, acceptance sampling and batch processing problems. Bayesian aspects of process control. The monotoned

#### 472 Design of Experiments (3) (Formerly 572)

Prerequisite: Management Science 441 or equivalent. Experimental design. Analysis of variance, factorial experiments, nested designs, confounding and factorial replications.

#### 473 Applied Statistical Forecasting (3) (Formerly 420)

Prerequisite: Management Science 441 or equivalent. Statistical methods applied to problems in business and industry; practical multiple regression models with computer solutions; basic techniques in time-series analysis of trend, cyclical and seasonal components; correlation of time-series and forecasting with the computer.

#### 475 Multivariate Analysis (3)

Prerequisites: Management Science 441 or equivalent. The least squares principle; estimation and hypothesis testing in linear regression; multiple and curvilinear regression models; discriminant analysis; principle components analysis; application of multivariate analysis in business and industry.

# 490 Queueing and Stochastic Models in Management Science (3) (Formerly 585)

Prerequisites: Management Science 362 or Mathematics 335. Probabilistic models in management science; theoretical foundation and model development for Poisson process models, birth-death models, Markovian and general queuing situations, and Markov chains; renewal theory and/or reliability models; practical business applications.

#### 495 Internship (1-3)

Prerequisites: Management Science 361 and 362, and major in management science, or Management Science 309 and major in management information systems or a major in international business, consent of department internship adviser, and at least junior standing, 2.5 GPA and one semester in residence at the university. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No Credit grading only.

## 499 Independent Study (1-3)

Prerequisites: Management Science 361 and 362, senior standing, and approval by the department chair. Open to qualified students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

#### 513 Statistical Analysis (3)

Prerequisites: Math 135, Management Science 265 (or equivalents) and classified SBAE status. Basic probability and descriptive statistics; sampling techniques; estimation and hypothesis testing; simple and multiple regression, correlation analysis; computer packages and other optional topics.

#### 514 Decision Models for Business and Economics (3)

Prerequisites: Management Science 513 and classified SBAE status. Linear programming; inventory; PERT-CPM; queueing; simulation, computer application, forecasting; time series, and other optional topics.

# 515 Management of Information in the Corporate Environment (3)

Prerequisite: Classified SBAE status. Review and application of management information systems in business. System planning, system design and analysis, use of files, decision support systems, expert systems, and implementation of management information systems.

# 526 Forecasting, Decision Analysis, and Experimental Design (3)

Prerequisites: Management Science 514 and classified SBAE status. Time series analysis. Trend, cyclical and seasonal components. Statistical decision theory. Fundamental principles of experimental design; interaction. Software packages.

# 550 Special Topics on Information Systems Design and Data Communication (3)

Prerequisites: Management Science 514 and classified SBAE standing. Information storage requirements; disk timing considerations; file organization and processing characteristics; data structures; modern data communication systems; computer networks.

#### 555 Data Structures and Data Base Management (3)

Prerequisites: Management Science 550 and classified SBAE standing. File structures. Multiple-key retrieval file organizations; Data Description Language (DDL) and Data Manipulation Language (DML); data independence; hierarchial, network and relational data bases. Students may not receive credit for both Management Science 408 and 555.

#### 560 Advanced Deterministic Models (3)

Prerequisites: Management Science 514 and classified SBAE standing. Advanced linear programming, dynamic programming, integer programming, non-linear programming, business applications. Software packages and computer utilization.

#### 561 Advanced Probabilistic Models (3)

Prerequisites: Management Science 514 and classified SBAE standing. Stochastic processes, Markov processes, advanced queueing and inventory models. Reliability. Software packages and computer utilization.

### 576 Business Modeling and Simulation (3)

Prerequisite: Management Science 513 or equivalent. Theory and application of modeling and simulation methodology. Probabilistic concepts in simulation; arrival pattern and service times; simulation languages and programming techniques; analysis of output; business applications.

#### 590 Seminar in Management Science (3)

Prerequisites: Management Science 526 and 560 and classified SBAE status. Selected advanced topics and/or case studies in operations research, statistics, and/or management information systems, varying from semester to semester. May be repeated for credit with consent of instructor.

#### 597 Project (3)

Prerequisite: classified SBAE status. Directed independent inquiry. Not open to students on academic probation.

### 599 Independent Graduate Research (1-3)

Prerequisites: classified SBAE status, consent of department chair and Associate Dean, Graduate Studies. May be repeated for credit. Not open to students on academic probation.

# Department of Marketing



Department Chair: Irene Lange Department Office: Langsdorf Hall 626

### Programs Offered Application Scholarship Fund Abardon Programs Offered

Bachelor of Arts in Business Administration

Concentration in Marketing

#### Master of Business Administration

Concentration in Marketing

#### Faculty

Catherine Atwong, Robert Barath, Grady Bruce, Scott Greene, Katrin Harich, Paul Hugstad, Robert Jones, Chiranjeev Kohli, Douglas LaBahn, Irene Lange, Lance Leuthesser, James Taylor, Robert Zimmer

#### Advisers

The Business Advising Center, Langsdorf Hall 700, provides information on admissions, curriculum and graduation requirements, registration and grading procedures, residence and similar academic matters. In addition, the Marketing Department provides advising on curriculum content and career opportunities.

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#### INTRODUCTION management brand the indolescent Notice of the interest of the in

Marketing is a basic business function covering a wide range of activities. It includes studying markets, planning products, pricing them, promoting them, selling them, and then delivering these products to customers. People in wholesaling, retailing, advertising agencies, research firms and transportation companies are all working in the marketing area. Any firm which is reviewing its product policies needs marketers to identify the market, choose the products, find where they can be sold and toriding data into business plans. lop itsed data pases, sales forecasting, in decide on a price for them.

# Credential Information description and the credential Information

For students interested in a teaching credential, the Department of Marketing offers courses which may be included in the Single Subject Waiver Program in Business.

Further information on the requirements for teaching credentials is found in the Teaching Programs section of the catalog and is also available from the Department of Secondary Education. Students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Office of Admission to Teacher Education. M. dornard Indiana Office

#### Prizes in Marketing

The Michael T. Ashton Memorial Scholarship for Outstanding Leadership

The Gordon S. Fyfe Memorial Award for Outstanding Academic Achievement

Outstanding Marketing Student Award International Marketing Association Award The Robert M. Olsen Scholarship Fund Award

#### BACHELOR OF ARTS IN BUSINESS **ADMINISTRATION**

See "Business Administration, Marketing Concentration."

#### MASTER OF BUSINESS ADMINISTRATION DEGREE

See "Business Administration, Marketing Concentration."

# **Marketing Courses**

#### 351 Principles of Marketing (3)

Prerequisite: Economics 202 or 210; corequisite: Management Science 361. Analyzes how managers of business enterprises can effectively market goods and services domestically and internationally to target customers. Covers marketing research, new product development, brand management, pricing, promotion, and distribution channels. The role of marketing is critically examined from the consumer, economics, legal, political and ethical/social responsibility perspectives.

#### 353 Marketing Analysis (3)

Prerequisite: Management Science 361; corequisite: Marketing 351 with a grade of "C" or better. Examination of information sources and applications for the marketer. Emphasis on transforming data into business plans. Topics include use of computerized data bases, sales forecasting, interpretation of survey data and the creation of marketing presentations. Extensive computer applications.

#### 370 Buyer Behavior (3)

Prerequisite: Marketing 351 and 353 with a grade of "C" or better. Consumer buying patterns, motivation and search behavior. The consumer decision-making process. Interdisciplinary concepts from economics, sociology, psychology, cultural anthropology and mass communications. Case analyses and research projects.

#### 379 Marketing Research Methods (3)

Prerequisites: Marketing 351, 353 with a grade of "C" or better and Management Science 361. Marketing research process: problem formulation, identifying sources, selecting data collection, analysis techniques, preparing research reports. Selecting marketing problems for research.

#### 401 Professional Selling (3)

Prerequisite: Marketing 351, 353, 370 and 379 with a grade of "C" or better. Salesmanship as an interpersonal influence process. Selling using principles of human behavior. Selling skills and techniques.

#### 405 Managing Advertising (3)

Prerequisite: Marketing 351, 353, 370 and 379 with a grade of "C" or better. Examines the management of the advertising function within the overall marketing task. Emphasis is given to managing distribution, managing the budget and managing creativity. Advertiser, advertising agency and media relationships are considered. International advertising is reviewed.

#### 415 Managing the Sales Force (3)

Prerequisite: Marketing 351, 353, 370 and 379 with a grade of "C" or better. The sales manager's role in the organization; recruiting and selecting sales people; sales training; formulating compensation and expense plans; supervising and stimulating sales activities; morale; sales planning; evaluating sales people; and distribution cost analysis.

#### 425 Retail Marketing Strategy (3)

Prerequisite: Marketing 351, 353, 370 and 379 with a grade of "C" or better. Examines the retailer's role in the marketing system from a management perspective; developing integrated marketing and financial strategies; positioning the retail offer to convey meaning to target customers; merchandise management and control; and addressing changing market conditions - domestic and international.

#### 435 Business Marketing Management (3)

Prerequisites: Marketing 351, 353, 370 and 379 with a grade of "C" or better. Examines the decision making implications in the business and organizational market as they apply to market segmentation, marketing planning and overall strategy formulation. The substrategies of product, price, promotion and distribution are discussed. International implications are considered.

#### 445 Multinational Marketing Strategies (3)

Prerequisites: Marketing Majors: Marketing 351, 353, 370 and 379 with a grade of "C" or better. International Business Majors: Marketing 351 with a grade of "C" or better, Economics 335 and Finance 370. Theories of international trade and role of marketing decisions across national boundaries and markets. Focuses on concepts and principles of marketing strategies in multinational organizations from market assessments, entry alternatives, positions of global interdependence, marketing problems and ethical implications. Integrative cases, individual and team efforts emphasized.

#### 465 Managing Services Marketing (3)

Prerequisite: Marketing 351, 353, 370 and 379 with a grade of "C" or better. Explores the differences between marketing services and marketing products. Also examines organizational requirements of firms that market services in contrast with marketing products. Considers the implications of marketing services internationally.

#### 475 Export Marketing Strategies (3)

Prerequisite: Marketing 351, 353, 370 and 379 with a grade of "C" or better. Increases the student's awareness of international trading trends, the importance of trade worldwide. Emphasis is on entrepreneurial aspects and organizational structure to appraise markets, evaluate alternative export strategies and understand planning process. Includes documentation, financial considerations, government regulations.

#### 489 Developing Marketing Strategies (3)

Prerequisites: Marketing 351, 353, 370, 379 and one 400-level marketing course, all with "C" grade or better and senior standing. Focuses on analysis of a wide variety of business situations. Analysis is followed by the development of a variety of possible marketing strategies. Extensive international orientation. Relies heavily on case studies and group interaction.

#### 495 Internship (1-3)

Prerequisites: six units of upper division marketing courses, including Marketing 351, major in marketing or international business, consent of department internship adviser, and at least junior standing, 2.5 GPA and one semester in residence at Cal State Fullerton. Planned and supervised work experience. May be repeated for credit up to a total of six units. Credit/No Credit only.

#### 499 Independent Study (1-3)

Prerequisites: marketing concentration, senior standing and approval by the department chair. Open to undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit. Not open to students on academic probation.

#### 519 Marketing Management (3)

Prerequisites: Accounting 510, Economics 515, Manag Sci 513, 514, Management 516, 518 (may be taken concurrently) and classified SBAE status. Concepts, principles and techniques used in the administration of the marketing variables. The role of marketing within the context of society and the business firm, social responsibility of business and international marketing.

#### 525 Seminar in Marketing Problems (3)

Prerequisites: Marketing 519 and classified SBAE status. Utilizes major marketing concepts: product development, market analysis, demand determination, pricing decisions, promotion activities, distribution channels and organizational requirements. Students develop analytical skills by working with marketing and business problems from domestic and global perspectives. Lecture and case method.

#### 555 Marketing Strategy and Planning (3)

Prerequisite: Classified SBAE status. Analysis of business situations and development of marketing strategy to gain competitive advantage. Uses strategy development tools such as experience curves, PLC, BCG grid, GE business policy directional matrix among others. Extensive use of case analysis and decision making.

#### 596 Contemporary Topics in Marketing (3)

Prerequisites: Marketing 519 or equivalent; classified SBAE status. Topics in areas such as marketing of services, public policy and consumer issues and strategic planning. May be repeated for credit.

#### 599 Independent Graduate Research (1-3)

Prerequisites: classified SBAE status, consent of instructor and approval by department chair and Associate Dean, Graduate Studies. May be repeated for credit. Not open to students on academic probation.

475 Export Marketing Strategies (3)
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stand planning maces, includes documentation, indicated
siderations, government regulations.

489 Developing Marketing Structures (3)
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199 Independent Study (1-7)
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525 Semmar in Marketing Problems (3) and will at noise? Preparational states that keiting 119 and classified SBAE cutus. Utilizes major marketing concepts product development market analysis sis demand determination, pricing decisions, promotion activities, distribution channels and organizational requirements. Students develop analytical skills by working, with marketing and business problems man demonstrated global perspectives. Leature and case method.

555 Marketing breatury and Planning (3).

Prorequisite: Classified SBAE status, Analysis of business statution and development of marketing strategy to gen competitive advantage. User strategy development trools such as experience curves.

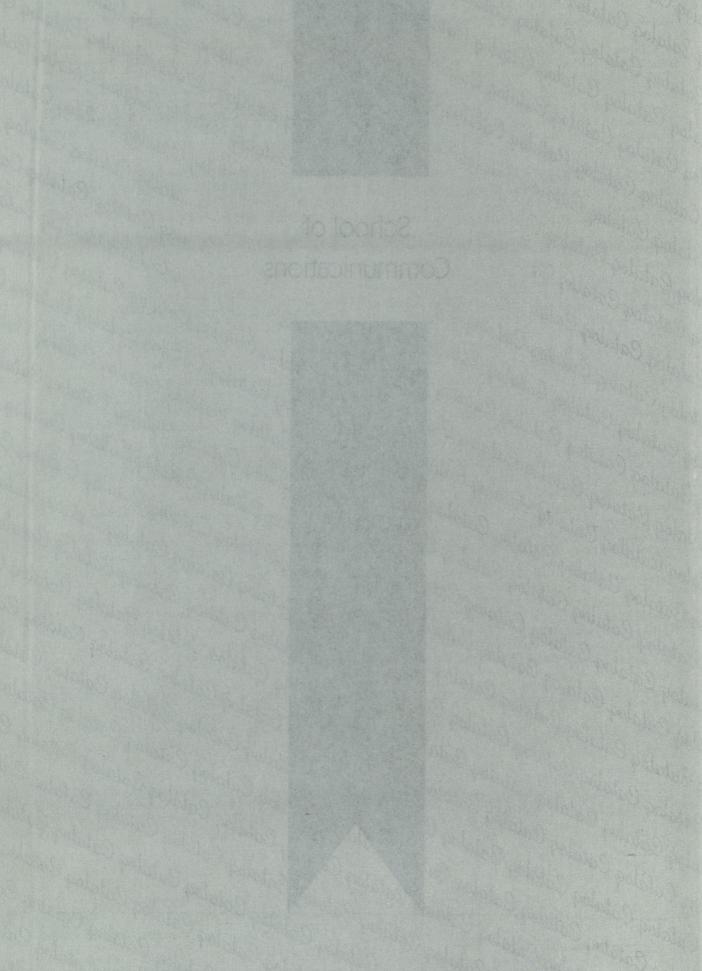
PLC PCG and, GE lyastices policy directional matrix agnoise others. Extensive use of one analysis and decision making.

596 Contemporary Topics in Merkeding (3)
Presquisities: Marketing 519 or equivalent; classified SB3E status. Topics in areas such as marketing of services, public policy and consumer issues and itements plan play. May be accessed for oredic.

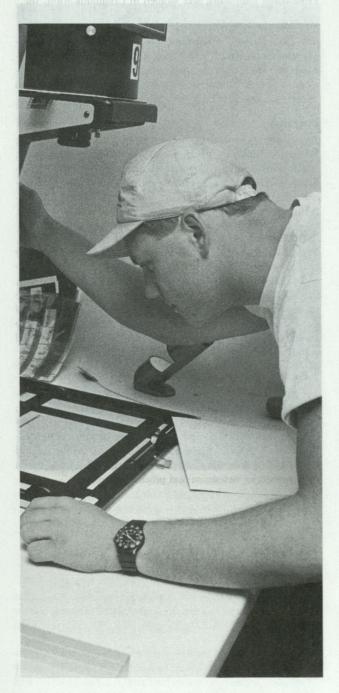
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# School of Communications



Dean: Elizabeth W. Mechling Associate Dean: Rick D. Pullen

Programs offered was sale as sale of data at valence to

Bachelor of Arts In Communications

Concentrations in: Advertising

Iournalism

Photocommunications Public Relations Radio-Television-Film

Bachelor of Arts in Communicative Disorders

Bachelor of Arts in Speech Communication

Master of Arts in Communications

Concentrations in: Advertising

Undergradiante studente may emillism y carrette obtice for the Public Relations

Radio-Television-Film

Master of Arts in Communicative Disorders

Clinical Rehabilitative Services Credential (CRSC) with Special Class Authorization (SCA)

Master of Arts in Speech Communication

Minor in Speech Communication

Waiver Program for the Single Subject Credential

The School of Communications is committed to advancing a democratic society by preparing students to function in a wide variety of communication professions. With a strong tradition in the liberal arts and social sciences, the academic programs of the School share a common theoretical base which identifies the elements of human communication and the principles governing their use in all communicative processes essential to contemporary society, namely, the spoken and written word and visual images. Specialized programs in advertising, communication theory and process, intercultural, interpersonal, organizational communication, communication studies, communicative disorders, news-editorial, photocommunications, public relations, and radio-television-film make up the basic curricula of the School. These programs of study lead to traditional academic degrees for undergraduates and graduates, to state credentials and licenses, to professional certification, and to entry into graduate and professional degree programs.

Academic programs in the School of Communications prepare students to function as communication professionals in the fields of business, education, government, and the health-related professions. Undergraduate and graduate degrees are offered in Communications, Communicative Disorders, and Speech Communication. Ancillary education experiences are available through the campus daily newspaper, television facilities, forensics program (debate), speech and hearing clinic, and internships in professional settings.

The School also serves as a locus for the surrounding professional community in which leaders in the communication professions provide and receive advice and counsel on matters related to public interest, curricular development, career interests, and opportunities for service to the greater good of the community as a whole.

The School is dedicated to the principles of academic excellence and sees its fundamental mission as preparing citizens to function as effective communicators who practice their disciplines in accordance with the highest ethical codes of professional and personal conduct.

#### Advisement

Undergraduate students may call their department office for the name of their adviser, who will assist in developing a program of study. University policy requires students to see an adviser each of their first two semesters and every year thereafter. Three critical times for advising are before registering for the first semester, when selecting electives for the study plan, and two semesters before graduation for a graduation check.

Graduate students should make contact with their department graduate adviser to arrange for advisement prior to entry into the master's degree programs.

#### Student Organizations

The School of Communications supports a large number of student organizations and activities which provide a wide variety of pre-professional opportunities for academic advancement. They include: the Advertising Club: National Student SpeechLanguage-Hearing Association; Association of Speech Communication Students; Broadcast Production Association; Communications Week; Daily Titan; Debate (forensics); International Association of Business Communicators; Latino Communications Society; National Press Photographers Association; Photography Club; Public Relations Student Society of America; Society of Professional Journalists; and Women in Communication, Inc.

#### Accreditation

The Department of Communications is accredited by the Accrediting Council on Education in Journalism and Mass Communications. The Communicative Disorders program in the Department of Speech Communication is accredited by the American Speech-Language-Hearing Association.

#### Internships

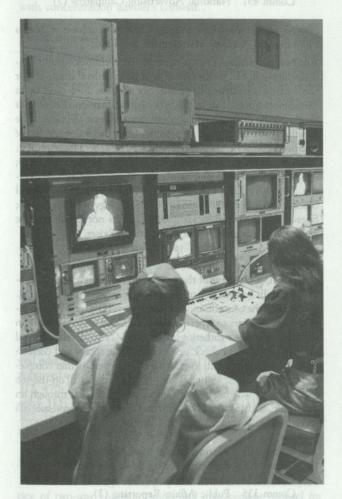
A wide variety of student internships are available throughout Southern California. In the Department of Communications, students are required to complete an internship, unless specifically waived from doing so, normally as the culminating undergraduate experience. The Speech Communications internship is normally taken sometime in the junior or senior year.

#### Scholarships and Awards

Some \$30,000 in scholarships and awards is presented annually to students in the School of Communications. Among the sponsors of scholarships are the Advertising Club of Orange County, the Business/Professional Advertising Association of Orange County, the Hearst Foundation, the Orange County chapter of the Public Relations Society of America. Awards annually are presented to students who excel in academic and pre-professional activities in the two departments.

#### Facilities

The School of Communications is equipped with modern laboratory facilities including a sophisticated speech and hearing clinic; large and comprehensive photography darkroom and studio facility; two 20-station computerized writing laboratories; a MacIntosh-based graphics laboratory; a television studio, control room, and video editing bays; a film editing laboratory; and a daily newspaper newsroom and production area.



# Department of Communications

Department Chair: Terry Hynes Department Office: Humanities 230 Daily Titan Newsroom: Humanities 213 Daily Titan Business Manager: Humanities 211

#### Programs Offered

Bachelor of Arts in Communications

Concentrations: Advertising carions one of the 424 and re mailson Journalism of this 84 Photocommunications Photocommunications Public Relations Radio-Television-Film

#### Master of Arts in Communications

Advertising Concentrations: Journalism Public Relations of angular amount Radio-Television-Film

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Carl Burrowes, Wendell Crow, David DeVries, Ronald Dyas, Tony Fellow, Edward Fink, Joanne Gula, Terry Hynes, Carolyn Johnson, Paul Lester, Sirish Mani, George Manross, George Mastroianni, Norman Nager, Coral Ohl, Wayne Overbeck, Robert Picard, David Pincus, Rick Pullen, Tony Rimmer, Marvin Rosen, Shay Sayre, Don Sunoo, Edgar Trotter, Larry Ward, Fred Zandpour

#### Advisers

Undergraduate: All faculty serve as undergraduate advisers. Students may find their assigned concentration adviser posted on the bulletin board outside Humanities 230. Graduate: Tony Rimmer (2001) 1000 (2014) (2014) (2014)

Additional advising services are available in the School of Communications Advising Center, Humanities 328.

#### INTRODUCTION

Effective ethical communications are essential for the well-being of a democratic society. Thus, there is a need for persons trained in the theory and practice of informing, instructing, and persuading through communications media. The educational objectives of the programs leading to the Bachelor of Arts in Communications are: (1) to ensure that all majors receive a broad liberal education; (2) to provide majors with a clear understanding of the role of communications media in society; and (3) to prepare majors desiring communications-related careers in the mass media, business, government and education by educating them indepth in one of the specialized sequences within the department.

#### **BACHELOR OF ARTS IN COMMUNICATIONS**

A communications major is required to take 11 units of core requirements in addition to 23 units in a chosen concentration. The department offers five concentrations: advertising, journalism, photocommunications, public relations, and radio-television-film. Students may substitute a broadcast journalism program shared between the journalism and radio-television-film concentrations. The major totals 36 units.

Collateral requirements: Twelve units of upper-division course work in other departments approved by the student's concentration adviser are also required. Collateral courses are listed on advising materials available in Humanities 230.

Every major must take a minimum of 84 units outside communications out of the 124 units required for graduation. Of this 84 units, 65 must be in the traditional liberal arts, humanities & sciences. Students should consult their concentration adviser and the School of Communications Advisement Center early in their course work to be sure they meet these requirements.

#### Communications Core

The communications core provides background and perspective appropriate to all the departmental concentrations and an understanding of the role of communicators and their contributions to the development of high standards of professionalism.

Nine units of required course work:

Comm 233 Mass Comm in Modern Society (3)

Comm 407 Communications Law (3)

Comm 425 History and Philosophy of American

Mass Communication (3)

Plus three units selected from the following:

Comm 300 Visual Communication (3)

Comm 410 Principles of Comm Research (3)

Comm 426 World Communication Systems (3)

Comm 427 Current Issues in Mass Comm (3)

Comm 428 Communications and Social Change (3)

Comm 476 Children's Television (3)

Comm 480 Persuasive Communications (3)

#### Communications Concentrations

Every communications major must select and complete 24 units of course work in a major concentration.

#### Advertising

The objective of the advertising concentration is to prepare students for entry-level positions in one or more of the four basic advertising activities: creative (copy, layout design), media, research, and management. Students are provided with knowledge and skills needed for work with an advertiser, advertising agency, the print and broadcast media, or support service industry.

Comm 350 Principles of Advertising (3)

Writing for the Advertising Industry (3) Comm 351

Comm 352 Advertising Media (3)

Advertising Copy and Layout (3) Comm 353

Comm 439 Mass Media Internship (3)

Comm 451 National Advertising Campaigns (3)

Plus six Communications units in Creative Emphasis or Media Planning and Account Management Emphasis:

And twelve collateral units of upper-division courses beyond general education. Six of these units must be in general studio art for the creative advertising emphasis. Six of these units must be in management/marketing in the School of Business and Economics for the media planning and account management emphasis. The remaining six units must be selected from the following list of approved courses: American Studies 301, 318, 345; Art 300, 307A,B; 317A,B; 323A,B; 338A, 339A, 347A,B; 363A,B; 438A, B; Economics 310; English 301; Managment 340; Marketing 351, 401, 379, 425, 435, 445; Philosophy 312; Political Science 310; Psychology 351, 361; Sociology 345, 372, 436; Speech Communication 320, 333. Courses not listed must be approved in advance by a concentration adviser.

#### **Journalism**

The principal objective of the journalism concentration is to provide the skills and practice necessary for careers in the print media. Specifically, the concentration objectives are: (1) to provide experience in writing various types of news stories, and to develop skills in reporting and news gathering techniques; (2) to develop critical acumen necessary to check news stories for accuracy and correctness; (3) to develop skills in graphics or photography that complement the journalistic writing skills; (4) to provide actual on-the-job experience by working on the campus newspaper and through an internship, and (5) to add breadth and depth to the professional's specialized skills through collateral courses.

Comm 101 Writing for the Mass Media (3) Comm 201 Reporting for the Mass Media (3) Comm 332 Copy Editing and Makeup (3) Comm 335 Public Affairs Reporting (3) Comm 338 Newspaper Production (3) Comm 439 Mass Media Internship (3)

Plus three units from: Communications 217 or Comm 358 (with adviser's consent).

And three units from: Communications 334, 430, 435, 436. Students who want to pursue broadcast journalism may substitute the above concentration requirements with the following courses: Communications 101, 279, 302, 335, 371, 372, 382, and 439.

And twelve collateral units of upper-division courses in four different departments which must be selected from the following list of approved courses: American Studies 412; Economics 330, 335, 350, 361; English 300, 303, 305, 423, 462, 463, 464; History 475, 476, 479, 484, 485B, 486, 487; Philosophy 300, 301, 304, 345; Political Science 315, 340, 350, 375, 413, 440, 442, 443, 451, 457, 461, 473; Religious Studies 390; Sociology 301, 341, 345, 348. Courses not listed must be approved in advance by adviser. Students may substitute a University-approved minor with concentration adviser's consent.

#### Photocommunications

The photocommunications concentration provides a comprehensive study of the aesthetics, theories, and practices of contemporary photography for professional careers in magazine and newspaper photojournalism, and advertising/commercial photography.

Comm 101 Writing for the Mass Media (3) Comm 217 Introduction to Black and White

Photography (3)

Comm 319 Photojournalism (3)

Comm 321 Advanced Color Photography (3)

Comm 439 Mass Media Internship (3)

Plus six units selected from the following:

Comm 311, 326, 338, 340, 358, 409, 460.

Plus one of the following classes:

Comm 301, 334, 362.

And twelve collateral units of upper-division courses beyond general education which must be selected from the following list of approved courses: American Studies 433; Anthropology 306; Art 312, 470; Biology 411; Chemistry 301A, B; Finance 310; Philosophy 311; Physics 411; Political Science 300, 310; Psychology 303, 351; Sociology 345. Courses not listed must be approved in advance by a concentration adviser.

#### **Public Relations**

This concentration provides preparation in both theory and practice of two-way communication and management counsel for prospective professional public relations careers in business, industry, agency, government, and nonprofit sectors of society.

Writing for Mass Media (3) Comm 101

Principles of Public Relations (3) Comm 361

Public Relations Writing (3) Comm 362

Comm 439 Mass Media Internship (3)

Comm 464 Public Relations Management (3)

Plus one writing course from among the following: Comm 301, 334, or 338

Plus six units selected from the following:

Comm 217, 350, 358, 363, 410, 467, 468, 497

And twelve collateral units of upper division courses beyond general education which must be selected from the following: Art 323A.B: Economics 310, 320, 410; Finance 320, 340; Management 339, 340, 343; Marketing 351; Management Science 422; English 301, 360; Geography 370; Physical Ed 408; Political Science 309, 405, 448; Psychology 351, 391, 413, 472; Sociology 341, 345, 348, 473; Speech Communication 300, 320, 324, 326, 333, 334, 420. Courses not listed must be approved in advance by a concentration adviser.

#### Radio-Television-Film

Courses in this concentration are designed for an understanding of the history, theory and practice of radio-television and film. Students are prepared for entry level positions in business, education, and the broadcasting, cable and film industries.

Comm 279 Introduction to Video Production (3)

Comm 301 Writing for Broadcasting and Film (3)

Comm 382 Broadcasting in America (3)

Comm 402 Advanced Writing for Radio, TV and Film (3)

Comm 439 Mass Media Internship (3) Viscourbno

Plus nine units selected from the following:

Comm 278, 311, 345, 375, 379, 383, 411, 476, 477, 478, 484, 488

And twelve collateral units of upper-division courses beyond general education which must be selected from the following list of approved courses: Art 312; Economics 320, 340, 350; English 322, 463, 465; History 476, 485; Management 339, 340, 343, 441; Marketing 351; Political Science 410, 414; Psychology 350, 351; Sociology 348, 371, 436; Speech Communication 320, 324, 325, 333; Theatre 364, 370A. Courses not listed must be approved in advance by a concentration adviser.

Students who want to pursue broadcast journalism may substitute the above concentration requirements with the following courses: Communications 101, 279, 302, 335, 371, 372, 382, and 439 as well as the collateral course requirements listed under the journalism concentration.

#### Writing Requirements

A communications major must satisfy both departmental and university writing requirements. A grade of C or better in English 101 or an equivalent course is a prerequisite for all Communications writing courses. Students who complete an equivalent to CSUF's English 101 at a community college or another four-year college/university must bring a copy of the relevant transcript to the department office, Humanities 230.

University Writing Requirement: The course work portion of the university's upper-division baccalaureate writing requirement for communications majors may be met by satisfactory completion of any one of Communications 301, 334, 335, 338, 351, 362, 371, 402, and 435. Students must earn a "C" or better in the course which is used to fulfill the university's upper-division writing evel courses appropriate to the communications. Information

#### MASTER OF ARTS IN COMMUNICATIONS

The degree is designed to provide advanced study in communications theory and research plus some concentration in one of the department's sequences: advertising, journalism, public relations, or radio-television-film.

The program prepares the graduate to apply advanced communications concepts, research and development skills, and theories relevant to the use of communications media for a wide variety of purposes. Such study may serve those whose careers involve the use of print, broadcast and film media of communications to inform, instruct and persuade. Communications skills are highly applicable to a wide range of careers in business, industry, government, education and the mass media.

Students completing the Master of Arts in Communications are eligible for journalism teaching positions in community colleges.

#### Admission to Graduate Standing: Conditionally Classified

Normally, an applicant must meet grade-point average requirements of 3.0 in the undergraduate major and 2.75 in the last 60 semester units of undergraduate course work, meet the university requirements, and satisfactorily complete the Graduate Record Examination General Test prior to admission. Students must also submit three letters of recommendation and an essay (approximately 1000 words) outlining reasons for pursuing the master's degree. Consult department graduate program adviser for details regarding additional admission requirements.

## Graduate Standing: Classified

A student admitted in conditionally classified standing may be granted classified standing upon the development of an approved study plan and satisfactory completion of prerequisite course work. Satisfactory coursework or its equivalent in the following may be taken concurrently with degree requirements if not completed prior to classification:

- (a) communications writing (Comm 201, 301, 351, or 362)
- (b) an introductory course in the area of specialization (Comm 332, 350, 361 or 382)
- (c) Comm 410 Principles of Communication Research 1910 to your market state when the production of the control of the cont

#### Study Plan

The student is required to complete 30 units of approved studies with a minimum grade-point average of 3.0 including 15 units in 500-level communications courses. Six of the 15 units of 500level courses may be in thesis, three units may be in a project. The remaining units will be comprised of upper division or 500level courses appropriate to the communications sequence.

The candidate shall develop a program of study in consultation with a concentration adviser and the graduate adviser of the Department of Communications. The candidate shall plan the thesis or project topic with a committee. The committee will include at least two faculty members from the Department of Communications.

Study plan requirements include the following:

Core Courses (6 units)

Comm 500 Theory and Literature of Communications Comm 508 Humanistic Research in Communications or Comm 509 Social Science Research in Communications

Sequence-Related Courses (18 units)

Comm 515T Professional Problems in Related Fields or approved 500-level alternate

Comm 520A, B or C Communications Practicum or approved alternate

Consult the Communications Department Master's Program bulletin for additional sequence requirements.

Electives (0-6 units)

Project/Thesis/Exam (0-6 units)

Comm 597 Project (3) or Comm 598 Thesis (6) or Comprehensive Exam

For further information and advisement, please consult the graduate program adviser.

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### Communications Courses

101 Writing for the Mass Media (3)

Prerequisite: English 101 or equivalent with a grade of C or better; typing ability. Principles and practices of writing for major types of mass communications media. Content, organization, conciseness and clarity. (CAN JOUR 2)

201 Reporting for the Mass Media (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Communications 101 or equivalent; typing ability. Development of expertise in the use of news reporting techniques combined with development of ability to compose complex journalistic writing forms for possible publication.

#### 217 Introduction to Black and White Photography (3)

Cameras, accessories, materials, exposure, image, processing, printing, finishing, composition, filters, flash, studio techniques, and special subject treatments and applications. (2 hours lecture, 2 hours activity)

#### 233 Mass Communication in Modern Society (3)

Newspapers, magazines, films, radio and television; their significance as social instruments and economic entities in modern society. (CAN JOUR 4)

#### 278 Introduction to Audio Production (3) (Formerly 378)

Prerequisite: Communications majors only. Audio production as it pertains to radio broadcasting, commercial production, and recording, television and film audio, (2 hours lecture, 3 hours laboratory)

#### 279 Introduction to Video Production (3) (Formerly 390)

Production of programs for broadcast stations and other video materials for cable, business, industrial, and instructional applications. (2 hours lecture, 3 hours laboratory)

#### 300 Visual Communication (3)

Prerequisite: Comm 233. A social and cultural analysis of the meaning, production and consumption of visual information in a modern media society. Still, moving, television, graphic design, cartoon, and computer images will be analyzed in terms of technical, commercial, and cultural considerations.

#### 301 Writing for Broadcasting and Film (3)

Prerequisite: English 101 or equivalent with a grade of C or better; typing ability. Theory and principles of writing in the broadcast and film media.

### 302 Writing Broadcast News (3) appropriate particular and the second sec

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 101 or equivalent; typing ability. Intensive journalistic writing and reporting for radio and television. Emphasis on writing assignments for both audio and video tape. Lecture/ discussion of issues and responsibilities facing broadcast journal-

#### 311 Introduction to Motion Picture Production (3)

Theory and practice of motion picture photography and film production. (2 hours lecture, 3 hours laboratory)

#### 319 Photojournalism (3)

Prerequisite: Comm 217 or equivalent. Photography for publication in print media. News, advertising, feature, sports, lifestyle, photo essay and documentary applications. (2 hours lecture, 3 hours laboratory)

#### 321 Advanced Color Photography (3)

Prerequisites: Junior standing and Comm 319 or consent of instructor. Positive and negative color film processing sensitometry, and color printing. Creative and effective use of color in publications photography. (2 hours lecture, 3 hours laboratory)

# 326 Communications Photography (3)

Prerequisites: Junior standing and Comm 321, or consent of instructor. Photographs and photographic communications produced with the large format camera for the mass media, business, education, government, industry and science. (2 hours lecture, 3 hours laboratory)

#### 332 Copy Editing and Makeup (3)

Prerequisites: English 101 or equivalent with a grade of C or better; and Comm 201 or equivalent. Principles and practice of newspaper editing: copy improvement, headline writing, news photos and cutlines, wire services, typography, copy schedules and control, page design and layout, law and ethics. (2 hours lecture, 3 hours laboratory)

#### 334 Feature Article Writing (3)

Prerequisites: English 101 or equivalent with a grade of C or better; and Comm 101 or equivalent. Nonfiction writing for newspapers and magazines; sources, methods and markets.

#### 335 Public Affairs Reporting (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 101 and 201, or consent of instructor; and junior standing. Comm 407 recommended. Reporting public interest news such as courts, education, finance, government, police and urban problems.

#### 338 Newspaper Production (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 201 or equivalent or consent of instructor. Members of the class constitute the editorial staff of the university newspaper. Meets four hours per week for critiques in news reporting, writing, editing and makeup, followed by production. May be repeated for a maximum of six units of credit. (More than 9 hours laboratory) (8) galiful anolisis Relation 9 hours laboratory)

#### 340 Photography in Advertising and Public Relations (3)

Prerequisites: junior standing and Comm 326 or consent of instructor. Advertising and public relations photography. Materials and techniques for producing photographs with visual impact suitable for photo reproduction. Students will prepare a portfolio of photographs. (2 hours lecture, 3 hours activity)

#### 345 The Language of Film and Television (3)

Prerequisite: Comm 233 or consent of instructor. Critical and theoretical analysis of film and television as communication. Examines the manner in which an organized sequence of images and sounds communicates meaning using literature in semiology and visual communications. has avel notivelel other

# 350 Principles of Advertising (3)

Advertising in America. The language and art of advertising and its role in marketing.

351 Writing for the Advertising Industry (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 350. This course will focus on the theoretical and practical elements of professional and creative writing for advertising. Emphasis will be placed on polishing English language skills that will be used in writing formal proposals, as well as in communicating strategic and creative ideas.

352 Advertising Media (3)

Prerequisites: Comm 350 and junior standing. Planning, execution and control of advertising media programs. Basic data and characteristics of the media. Buying and selling process, techniques, and methods in media planning process. Audience measurement and media analysis.

353 Advertising Copy and Layout (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 350, 351 or consent of instructor; and junior standing. Writing of copy and layout of advertisements, based on study of sales appeals, attention factors and illustrations. (2 hours lecture, 2 hours activity)

358 Graphics Communications (3)

Prerequisite: junior standing. Printing processes, publication formats, copy preparation, copy-fitting techniques, layout principles, paper selection and distribution methods. (2 hours lecture, 2 hours activity)

361 Principles of Public Relations (3)

Prerequisite: junior standing. The social, behavioral, psychological, ethical, economic and political foundations of public relations, and the theories of public relations as a communications discipline.

362 Public Relations Writing (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 101 or consent of instructor; typing ability; junior standing. Communications analysis, writing for business, industry and nonprofit organizations. Creating effective forms of public relations communication. (2 hours lecture, 2 hours activity)

363 Publications Editing (3)

Prerequisites: Comm 361 and six units of communications writing or consent of instructor; and, junior standing. Editing functions and techniques involved in creative development of publications for business, industry and nonprofit organizations and institutions. Magazines, newspapers, newsletters and brochures.

371 Radio-Television News and Public Affairs (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 101, 279, 302 and 382; typing ability required. Covering news events and public affairs for radio and television. (2 hours lecture, 3 hours lab)

372 Advanced TV News Production (3)

Prerequisite: Comm 371 or consent of instructor. Writing, production and evaluation of television newscasts for local cable TV distribution. Lecture-discussion sessions on advanced reporting techniques and special problems in broadcast journalism. (2 hours lecture, 3 hours laboratory)

375 The Documentary Film (3)

Purpose, development, current trends, critical analysis and production requirements of the documentary film. Future of the medium in business, government, education, and television.

379 Electronic Field Production (3) (Formerly 479)

Prerequisite: Comm 279. Producing programs for broadcast and other applications for cable, business, industrial and instructional use. Emphasis on location shooting and post production including electronic editing. (2 hours lecture, 3 hours laboratory)

381 Broadcast Copywriting (3)

Prerequisite: Comm 350 and junior standing. Writing of advertising copy for radio and television, based upon study of unique media and audience characteristics, costs and coverages. (2 hours lecture, 3 hours laboratory)

382 Broadcasting in America (3)

Prerequisite: Communications major or consent of instructor. The foundation course of the telecommunications sequence. Radio and television from a professional perspective. Economic, historical, regulatory aspects and the social effects of these media.

383 World Cinema (3)

Prerequisites: History 110B and English 103. The study of the motion picture as a global influence in mass communications and entertainment. An examination of various directors, film movements, national cinemas, and of the increasing internationalization of the world film industry. Film screenings on and off campus.

402 Advanced Writing for Radio, Television and Film (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 301, and junior standing. An advanced writing class concentrating on the long form of broadcast and film writing, including documentaries, features, special news, commentaries, and analysis.

407 Communications Law (3)

Prerequisites: Comm 233 and junior standing. The Anglo-American concept of freedom of speech and press; statutes and administrative regulations affecting freedom of information and publishing, advertising, and telecommunication. Libel and slander, rights in news and advertising, contempt, copyright, and invasion of privacy.

# 409 Advanced Photojournalism (3)

Prerequisites: Comm 321 and junior standing or instructor's consent. Advanced press photography. Extensive use of cameras for photographic reporting; evaluation and preparation of pictures for publication. Field/laboratory experience in black and white and color. (2 hours lecture, 3 hours laboratory)

#### 410 Principles of Communication Research (3)

Prerequisites: Comm 233 and junior standing. Research methods used to assess the effects of print, broadcast, and film communications on audience attitudes, opinions, knowledge, and behavior. Research design and data analysis in communications re-

#### 411 Advanced Motion Picture Production (3)

Prerequisites: Comm 301, 311, or consent of instructor. Theory, procedures and practice in film production: motion picture (silent and sound), scriptwriting, transfer and mixes, production, distribution and financing. (2 hours lecture, 3 hours lab)

#### 425 History and Philosophy of American Mass Communication (3)

Prerequisites: Comm 233 and junior standing. American mass communication; newspapers and periodicals through radio and television; ideological, political, social and economic aspects.

#### 426 World Communication Systems (3)

Prerequisites: Comm 233 and junior standing. Major mass communication systems, both democratic and totalitarian, and the means by which news and propaganda are conveyed internationally.

#### 427 Current Issues in Mass Communication (3)

Prerequisites: Comm 233, 407 and 425 and junior standing. Exploration of current issues which cross department sequences. Controversial and changing concepts of the function and role of the mass media. The stand and the second of the second of

#### 428 Communications and Social Change (3)

Prerequisites: Comm 233 and junior standing. How innovations ideas, products, and practices perceived as new - are communicated to members of a social system. The roles of adopters, opinion leaders, change agents and communications in the diffusion of innovations and consequent changes in social systems.

# 430 Newspaper Management (3)

Prerequisite: Consent of instructor and junior standing. Organization, operation and administration of a newspaper's departmental activities: advertising, business, circulation, mechanical, news-editorial and promotion. (3 hours lecture, field trips, detailed study of one selected newspaper department)

## 435 Editorial and Critical Writing (3)

Prerequisites: English 101 or equivalent with a grade of C or better; upper division writing course and junior standing. Editorial and critical writer and opinion columnist roles. Techniques of editorial writing and aspects of critical thinking. (2 hours lecture; 2 hours lab and fieldwork)

#### 436 Investigative and Specialized Reporting (3)

Prerequisites: English 101 or equivalent with a grade of C or better; Comm 332, 335 and 407; and junior standing. Investigative and interpretive reporting of complex or specialized subjects.

### 439 Mass Media Internship (3)

Prerequisites: Senior standing, communications major and consent of instructor. Supervised internship, according to sequence, with newspaper, magazine, radio or television station, press association, public relations firm or advertising agency. Application must be made through department coordinator one semester prior to entering program. (Credit/No Credit only)

### 450 Advertising Communications Management (3)

Prerequisites: Comm 350 and 352 and junior standing. Theory and techniques for planning, directing and evaluating advertising programs with emphasis on media-message strategies. Managerial approach with case studies to the solution of advertising communications problems.

# 451 National Advertising Campaigns (3)

Prerequisites: Comm 350, 352 and 353 and junior standing. Advertising campaigns and utilization of mass media, such as television, newspapers and magazines, in national advertising programs. Design of complete campaigns from idea to production

### 453 Advanced Copy Layout (3)

Prerequisites: English 101 or equivalent with a grade of "C" or better, Comm 350, Comm 353, Comm 358, junior standing. Advanced advertising projects involving application and execution of creative advertising strategies for mass media, including theory and practice of writing copy, and preparing comprehensive layouts and completed scripts. Group discussions, labs, and individual conferences.

#### 460 Advanced Studies in Professional Photography (3)

Prerequisites: Comm 326 and junior standing or instructor's consent. Analysis and execution of contemporary photographic concepts. Students will refine aesthetics and techniques culminating in a portfolio for professional entry into photojournalism or commercial media photography. (2 hours lecture, 3 hours laboratory)

### 464 Public Relations Management (3)

Prerequisites: Comm 361 and 362 and junior standing. Analysis of systems and strategies for planning public relations campaigns and solving/preventing problems. Individual, team case studies, in corporate development of proposals; actual use of tools in addition to role playing presentations to management.

#### 467 Public Relations Agency Seminar (3)

Prerequisites: Comm 101, 361 and junior standing. Seminar focuses on psychology and functions of client counseling, proposal writing, new business development, agency management, servicing clients, evaluation of methods, reporting results, and legal and ethical concerns.

#### 468 Corporate and Nonprofit Public Relations (3)

Prerequisites: Comm 101, Comm 361. This seminar focuses on the public relations strategies and tactics used in today's increasingly sophisticated and maturing corporate and nonprofit marketplaces. This advanced course, which relies heavily on professional guest speakers and in-class simulations/exercises, encompasses a host of specific topics, such as fund raising, corporate and social responsibility, media relations, and technology and ethical

#### 476 Children's Television (3)

Prerequisites: Comm 233, Comm 382 or equivalent. Overview of literature on effects of television on children. Includes advertising, violence, sexual stereotyping and programming. Stages of child development will be explored and correlated to the different effects that the media may have on children.

#### 477 Radio and TV Programming (3)

Prerequisite: Comm 382. The study of the purposes, philosophies, and methods of obtaining, developing, launching, scheduling, and evaluating programming for the various electronic media including commercial radio and television networks, commercial radio and television stations, cable television, and public radio and television.

### 478 Management in the Broadcasting & Film Industries (3)

Prerequisite: advanced standing, Comm 382 or consent of instructor. The study of management of the broadcasting, cable-TV and film industries with attention to financial structures, programming and government regulation.

#### 480 Persuasive Communications (3)

Prerequisites: Comm 233 and junior standing. Persuasive communications applied to mass communication. The communicator, audience, message content and structure, and social context in influencing attitudes, beliefs and opinions.

#### 484 Documentary Production (3)

Prerequisites: B average in Comm 279 and 379 or 488 and consent of instructor. A lecture/laboratory course in which students write and produce radio, television and film documentaries. (2 hours lecture, 3 hours laboratory)

#### 488 Production Workshop for Cable Television (3)

Prerequisites: B average in Comm 279 and 379 or consent of instructor. Students produce informational and sport programs for cable TV systems and radio stations. May be repeated once for credit; only three units may apply to major. (9 hours laboratory)

#### 496 Student-to-Student Tutorial (1-3)

Prerequisites: consent of instructor and previous superior performance in a similar or equivalent course. Under faculty supervision, student provides tutorial assistance in a communications course. May involve small group demonstrations and discussions, individual tutoring and evaluation of student performance as appropriate. May be repeated to a maximum of four units either separately or in combination with Comm 499.

#### 497 Seminar in Public Communications Practices (3)

Prerequisite: Comm 464, junior standing and consent of instructor. Operationalizing public relations management principles. Role of public relations in contemporary society. Ethics, social responsibilities and trends in the emerging profession.

#### 499 Independent Study (1-3)

Prerequisite: Consent of department chair. Individually supervised mass media projects and research on campus and in the community. May involve newspaper and magazine publishers, radio and television stations and public relations agencies. May be repeated up to a maximum of four units either separately or in combination with Comm 496.

#### 500 Theory and Literature of Communications (3)

Prerequisite: Conditional classified status. Theories and research on communication processes and effects; source, media, message, audience and content variables. Types, sources and uses of communication literature. Graduate seminar.

#### 508 Humanistic Research in Communications (3)

Prerequisites: Comm 410, 500 or concurrent enrollment and classified status. Humanistic methods of study in communications: historical research and critical analysis applied to problems, issues and creative works in communication. Graduate seminar.

#### 509 Social Science Research in Communications (3)

Prerequisites: Comm 410, 500 and classified status. Social-scientific research design and analysis and the study of communication processes and effects. Graduate seminar.

#### 515T Professional Problems in Specialized Fields (3)

Prerequisite: Comm 500. Selected topics and issues in the field of mass communications. Subjects vary each semester. May be repeated for a maximum of six units.

#### 517 Ethical Problems of the Mass Media (3)

Prerequisite: Comm 500. This course will study criticisms of specific functions of the mass media and public relations. The course will consist of three sections: the history of criticism; problem areas of the media; and practitioner response to criticism.

#### 519 Communications and Governance in America (3)

Prerequisite: Comm 500 or consent of instructor. The course will study relationships between systems of communications, particularly new communication technologies, and governmental institutions and processes within the American setting. It will explore how technological change relates to patterns of decision-making, management, and the content and flow of information among public officials.

#### 520A,B,C Communications Practicum (3,3,3)

Prerequisites: Comm 500 and six units of study-plan courses in area of specialization. Under supervision of a faculty member, students plan, design, conduct and evaluate a team project in their field of specialization: A - News-Editorial, B - Radio-Television-Film, C — Public Relations.

#### 525 Advanced Communications Management (3)

Prerequisite: Comm 500. The course is designed to provide the student with an up-to-date assessment of general management and communications management techniques, and to help equip the student for management positions in advertising, journalism, public relations and broadcasting.

#### 550 Advertising in Modern Society (3)

Prerequisite: Comm 500. Assessing the impact of advertising on society, the culture and economy. Philosophical rther than technical examinations of critical issues and problems such as economic and social effects of advertising, effects of value and life styles, ethics and regulation.

#### 597 Project (3)

Completion of creative project in a sequence beyond regularly offered course work.

### ommunication 598 Thesis (3 or 6)

Completion of a thesis in a sequence beyond regularly offered course work.

#### Speech & Hearing Chair Education Chalardonia 1904 599 Independent Graduate Research (1-3)

Prerequisite: consent of department chair. Individually supervised mass media projects or research for graduate students. May be repeated.

Majors in the Department of Speech Communication study harman communication as part of a liberal arts and social sciences

# Department of Speech Communication

Department Chair: Robert Emry

Department Office: Education Classroom 199

Speech & Hearing Clinic: Education Classroom 190

#### Programs Offered

Bachelor of Arts in Communicative Disorders

Master of Arts in Communicative Disorders

Clinical Rehabilitative Services Credential (CRSC) with Special Class Authorization (SCA)

Bachelor of Arts in Speech Communication

Minor in Speech Communication

Master of Arts in Speech Communication

Waiver Program for the Single Subject Credential

#### Faculty

K. Jeanine Congalton, Daniel Crary, Michael Davis, Robert Emry, George Enell, Joyce Flocken, Robert Gass, Kaye Good, William Gudykunst, Ruth Guzley, Mary Blake Huer, Lucy Keele, Kurt Kitselman, Edith Li, Emmett Long, Norman Page, John Reinard, Glyndon Riley, Terry Saenz, Robert L. Strain, Stella Ting-Toomey, Arden Thorum, A. Lynn Williams, Richard Wiseman, Toya Wyatt.

#### Advisers

Undergraduate: Norman Page, Speech Communication Graduate: William B. Gudykunst, Speech Communication; Edith Li, Communicative Disorders

#### INTRODUCTION

Majors in the Department of Speech Communication study human communication as part of a liberal arts and social sciences education, and in preparation for a variety of career choices. Students with communication background studies and training are: prepared to understand the roles communication plays in human interaction; skilled in facilitating and analyzing individual, small group, and public communication processes; experienced in planning and managing programs that improve the quality of communication; sensitized to cultural and pathological differences that influence communication effectiveness; and equipped to apply scientific methods and technical procedures to the study of communication improvement and competencies.

The Department of Speech Communication offers two undergraduate and two graduate degree programs in communicative disorders and in speech communication.



Instruction in Communicative Disorders has four specific goals: to discover relationships among human communication and other human behaviors; to provide students with an understanding of the communication process so they can evaluate normal and abnormal deviations; to provide theoretical understanding and functional skills which enable the clinician-in-training to diagnose and treat disorders of speech, voice, language and hearing; and to develop graduate professional practitioners of speech pathology capable of serving in clinics, community centers, hospitals, private practice and school settings.

Instruction in Speech Communication has four specific goals: to discover relationships among human communication and other human behaviors; to provide students with an understanding of the communication process enabling them to evaluate and affect their communication environments; to improve the quality of human communication; and to facilitate intellectual, social and political maturity by applying principles of communication. Students are prepared for careers as communication specialists in business, public relations, education and other professions requiring a high level of communication competencies such as the law and the ministry, and for doctoral level studies in speech communication.

#### PROFESSIONAL INFORMATION

#### Accreditation

The Communicative Disorders program is fully accredited by the American Speech-Language-Hearing Association (ASHA). Graduate study in this program leads to certification in speech-language pathology with ASHA (CCC-SLP).

The CCC-SLP is awarded by the American Speech-Language-Hearing Association to persons who (a) complete the M.A. Degree in speech-language pathology, (b) complete the required clinical practicum by taking prescribed combinations of clinical practicum courses listed in Appendix 4, (c) pass the National Teacher Examination (NTE) in Speech-Language Pathology, (d) successfully complete a Clinical Fellowship Year, (e) submit the appropriate application materials to the American Speech-Language-Hearing Association. All students should be familiar with the requirements for the CCC-SLP. All students should obtain a copy of the latest ASHA Membership and Certification Handbook during the last year of their graduate studies, and they should read all materials carefully. Their advisors are not responsible for informing students of ASHA requirements beyond those that are related directly to selection of classes and clinical practicum courses. Copies of the Handbook are available from the Graduate Assistant in the CSUF Speech and Hearing Clinics or directly from ASHA at the following address and telephone number:

American Speech-Language-Hearing Association
Membership and Certification Section
10801 Rockville Pike
Rockville, Maryland 20852
Telephone (301) 897-5700

#### Licensure

The speech-language pathology license is required to work as a speech-language pathologist in all settings in California except for the public school and in certain exempt federal employment settings. The license is awarded by the Speech-Language Pathology and Audiology Examining Committee (SPAEC) of the Medical Board of California to those who (a) complete the M.A. Degree or equivalent in speech-language pathology, (b) complete the required clinical practicum by selecting from among the clinical practicum courses listed in Appendix 4, (c) pass the National Examination in Speech-Language Pathology, (d) successfully complete a Required Professional Experience (RPE), and (e) submit the appropriate application materials to SPAEC.

Although students will have met or exceeded the academic and clinical practicum requirements for licensure in California by the time they complete their M.A. Degree and the last of the clinical practicum courses that are required for the Certificate of Clinical Competence in Speech-Language Pathology (ASHA), they should still become familiar with the specific requirements for licensure during their last year of graduate studies. Their advisors are not responsible for informing students of requirements for licensure beyond those that are related directly to selection of classes and clinical practicum courses. A copy of the "Student Manual for Licensure in Speech Pathology and Audiology" may be obtained from the Graduate Assistant in the CSUF Speech and Hearing Clinics or directly from SPAEC at the following address and telephone number:

Speech Pathology & Audiology Examining Committee 1434 Howe Avenue, Suite 86 Sacramento, CA 95825-3240 Telephone (916) 920-6388

#### Credential Information

As an addition to the degree in Communicative Disorders, the Speech Communication Department offers credential programs in Clinical Rehabilitative Services and in Clinical Rehabilitative Services with a Special Class Authorization seal approved by the Commission for Teacher Credentialing (CTC).

The Speech Communication Department offers course work leading to a waiver in the area of Language Arts for the Single Subject Credential Program (Secondary Education). Interested students should seek advisement from the department single subject waiver adviser.

#### Awards in the Department of Speech Communication

The following awards were established by family, friends and colleagues of the designees in memory of their commitment and contributions to students engaged in the study of human communication.

These awards provide recognition and/or financial assistance to outstanding students majoring in Speech Communication or Communicative Disorders.

The Seth A. Fessenden Award

The Herbert W. Booth Award

The Herbert W. Booth Outstanding Senior Award

The Philip J. Schreiner Award

The Lee E. Granell Award

The Wayne Brockriede Award

The John Scott McKay Textbook Award

#### Graduate Assistantships and Fellowships

The following appointments are awarded to outstanding graduate students in the form of competitively selected assistantships and lectureships:

Clinical Graduate Assistants

Graduate Assistants in Forensics

Graduate Assistants in Research

Lecturers in Speech Communication

# BACHELOR OF ARTS IN COMMUNICATIVE DISORDERS

Basic requirements: 45 units minimum

# Sophomore Level (6 units)

Speech Comm 241 Introduction to Phonetics (3)

Speech Comm 242 Introduction to Communicative Disorders (3)

#### Junior Level (15 units)

Speech Comm 300 Introduction to Research in Speech Communication (3)

Speech Comm 307 Speech & Language Development (3)

Speech Comm 344 Anatomy & Physiology of Speech &

Hearing (3)

Speech Comm 350 Speech & Hearing Science (3)

Speech Comm 351 Introduction to Child Language

Disorders (3)

#### Senior Level (21 units)

Speech Comm 461 Audiology & Audiometry (3)

Speech Comm 465 Aural Rehabilitation (3)

Speech Comm 471 Clinical Phonology (3)

Speech Comm 472 Voice & Craniofacial Disorders (3)

Speech Comm 474 Neurology & Neurogenic

Communicative Disorders (3)

Speech Comm 475 Fluency Disorders (3)

Speech Comm 476 Clinical Methods and Procedures (3)

#### Electives (3 units)

Speech Comm 302 Introduction to Manual

Communication (3)

Speech Comm 308 Quantitative Research Methods (3)

Speech Comm 312 Intermediate Sign Language (3)

Speech Comm 345 Communication & Aging (3)

Speech Comm 404 Communication Disorders of the

Bilingual/Multicultural Child (3)

Speech Comm 410 Teaching Language Handicapped Children (3)

Speech Comm 450 Acoustic Phonetics (3)

Speech Comm 473 Counseling in Communicative Disorders (3)

#### BACHELOR OF ARTS IN SPEECH COMMUNICATION

Basic Requirements: 42 units minimum

### Core Requirements (27 units)

Speech Comm 102 Public Speaking (3)

Speech Comm 200 Human Communication (3)

Speech Comm 236 Essentials of Debate (3)

Speech Comm 300 Introduction to Research (3)

Speech Comm 308 Quantitative Research Methods (3)

Speech Comm 320 Intercultural Communication (3)

Speech Comm 330 Rhetoric of Popular Culture (3)

or Speech Comm 335 Advanced Argumentation (3)
Speech Comm 313 Interpersonal Communication Theory

(3) or Speech Comm 332 Processes of Social Influence (3) Speech Comm 324 Small Group Communication (3)

or Speech Comm 326 Organizational Communication
Dynamics (3)

#### Electives (15 units)

Students choose 15 units of Speech Comm adviser-approved course work to form one of the following emphases:

#### Argumentation and Persuasion Emphasis

Choose from Speech Comm 330, 332, 334, 335, 337, 338, 420, 430, 432, 437, 438, 492.

#### Interpersonal Emphasis

Choose from Speech Comm 220, 254, 313, 324, 332, 413, 420, 437, 492.

#### Intercultural Emphasis

Choose from Speech Comm 220, 254, 313, 420, 422, 437, 492.

#### Organization Emphasis and Tallutenes decreased lie been bluode

Choose from Speech Comm 220, 324, 325, 326, 333, 334, 420, 433, 437, 492.

# Communication Studies Emphasis

Choose 15 hours of adviser-approved courses from at least two of the other four areas.

## MINOR IN SPEECH COMMUNICATION

Basic Requirements: 21 units of adviser-approved courses in speech communication.

#### MASTER OF ARTS IN COMMUNICATIVE DISORDERS AND IN SPEECH COMMUNICATION

The Master of Arts in Communicative Disorders (speech-language pathology and audiology), accredited by the Education Standards Board of the American Speech-Language-Hearing Association since 1969, is designed: (1) to provide students with graduate, professional level studies covering the broad field of communicative disorders; (2) to provide students with opportunities to observe, learn and serve communicatively impaired clients within a wide range of clinical facilities, both on-campus and off-campus; and (3) to train students to assess, diagnose and prescribe therapy plans, and to function as therapists for selected types and populations of the communicatively impaired.

The Master of Arts in Speech Communication is designed for students who have exceptional interest in and aptitude for study in the area of communication theory and process. The objectives of the degree include the following: to improve the student's academic and professional competence, to prepare the student for advanced graduate work toward the doctoral degree, to develop the student's research capabilities, to contribute to improvement in teaching or clinical skills, and to increase the student's knowledge in the specializations appropriate to the particular profession. The student is expected to demonstrate a high degree of intellectual competence and scholarly discipline, to evaluate critically, and to demonstrate mastery of the field of concentra-

# Admission to Graduate Standing: Conditionally Classified

Applicants must meet the university requirements for admission to conditionally classified graduate standing: a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted.

Applicants for Communicative Disorders Program must have a baccalaureate in communicative disorders or the equivalent. The equivalent consists of a prescribed list of courses which total 39 semester units and which form an appropriate background for graduate studies. Applicants for Speech Communication are required to have a baccalaureate in speech communication or an allied field or complete nine units of approved background studies in speech communication.

In addition, the following factors will be taken into consideration by the Graduate Committee in determining who shall be admitted to the program: O solvase synantide day lested O set Lore are absoluted certain that they will not later wish to work in the

- 1. Grade-point average. becassioned visvitasionemmos visuses
- 2. Letters of recommendation (preferably on department forms).
- 3. Professional objectives as presented in a student letter of intent.

# Graduate Standing: Classified

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements, may be granted classified graduate standing upon the development of an approved study plan: and a selecting selecting of the mental selection of the selection

- 1. Enrollment in Speech Comm 500, Research in Speech Communication, is required within the first nine units of graduate work included on the study plan. The property of the study plan.
- 2. Completion of the study plan with 30 units of studies approved by an adviser and the Department Graduate clinical clock bours completed at the other inst.semmoD be

### Study Plan with mustrasing leadings of the students and make a basely ad

Requirements for the Master of Arts degree in either Communicative Disorders or Speech Communication consists of (1) a minimum of 30 units of study approved by the department Graduate Committee, (2) at least 15 units in one of the major areas, (3) successful completion of comprehensive examinations and a thesis (six units) or a directed graduate study research project (three units), and (4) may include up to six units of adviser-approved elective course work outside the department.

Students in the Communicative Disorders program must complete one course in research methods (Speech Comm 500), one course in neurology (Speech Comm 542), one course in child language disorders (Speech Comm 577), one course in neurogenic disorders (Speech Comm 543 or 544), one course in alternative communication or multicultural issues (Speech Comm 554 or 576) and one course in speech disorders (Speech Comm 450, 570, 571, 573); phonological disorders (Speech Comm 574) is an optional course.

Students in the Speech Communication program must complete one course in theory (Speech Comm 536), one course in research methods (Speech Comm 500), and a minimum of three additional courses in 500-level seminars.

For further information, consult the Department of Speech Communication.

### CLINICAL REHABILITATIVE SERVICES CREDENTIAL

Speech-pathologists who wish to practice in the public school setting are required to obtain the Clinical Rehabilitative Services Credential, which they may declare as an objective when they apply for admission to the graduate program. The credential may also be declared as an objective at a later time as long as the student has maintained continuous enrollment in the graduate program. After the student leaves the graduate program, readmission is required in order to fulfill requirements for the credential. It is, therefore, strongly recommended that students complete the credential while working on the M.A. Degree unless they are absolutely certain that they will not later wish to work in the public schools.

The requirements for the CRSC are listed below. The required courses and practica must be completed with a grade-point average of 2.50, and at least a "C" must be earned for each course and practicum. Students are required to complete a total of 300 supervised clock hours of clinical practicum. Of these, 200 must be with children, 100 in the public school system, and 20 in diagnostics in the public school system. The hours must be supervised in all cases by persons holding ASHA Certificate of Clinical Competence in Speech-Language Pathology and the appropriate state license. The supervisor of the public school practicum must also hold the Clinical Rehabilitative Services Credential. If equivalencies have been granted for a clinical practicum that was completed at another university, appropriate documentation of clinical clock hours completed at the other institution must be provided to the Communicative Disorders Program so that it can be placed in the student's clinical practicum file.

Finally, the student must demonstrate proficiency (a) in speaking English through a speech and hearing screening process carried out in the Speech and Hearing Clinic of the Department of Speech Communication and (b) in reading and writing through passing the University Examination in Writing Proficiency (EWP) and through obtaining a "C" or better in Speech Comm 300 Introduction to Research in Speech Communication. Alternatively, the student may demonstrate reading and writing proficiency by obtaining a "C" or better Speech Comm 500 Research in Speech Communication. The speech and hearing clinic is to be completed before a student enrolls in the first clinical practicum. Students must also pass the CBEST Exam prior to receiving their credential. The Credential Coordinator should be contacted by the students early in their program to review requirements and give further information on the requirements for the credential.

#### Academic Requirements in the Major (68 units)

Speech Comm 241 Introduction to Phonetics (3)

Speech Comm 242 Introduction to Communicative

Disorders (3)

Speech Comm 300 Introduction to Research in Speech Communication (3)

Speech Comm 307 Speech & Language

Development (3)

Speech Comm 344 Anatomy & Physiology of Speech & Hearing (3)

Speech Comm 350 Speech and Hearing Science (3) Speech Comm 351 Introduction to Child Language

Disorders (3)

Speech Comm 404 Communicative Disorders of the Bilingual/Multicultural Child (3)

Speech Comm 461 Audiology & Audiometry (3) Aural Rehabilitation (3) Speech Comm 465

Speech Comm 471 Clinical Phonology (3)

Speech Comm 472 Voice & Craniofacial Disorders (3)

Speech Comm 473 Counseling in Communicative Disorders (3)

Speech Comm 474 Neurology & Neurogenic Communicative Disorders (3)

Fluency Disorders (3) Speech Comm 475

Clinical Methods & Procedures (3) Speech Comm 476 Seminar: Speech & Hearing Service Speech Comm 490

in Schools (2)

Speech Comm 542 Neurologic Bases of Speech and disg Language (3)

Speech Comm 571 Seminar in Fluency Disorders (3)

Speech Comm 573 Seminar in Voice Disorders (3) Speech Comm 574 Seminar in Phonological

Disorders (3)

Speech Comm 576 Seminar in Augmentative & Alternative Communication (3)

Speech Comm 577 Seminar in Child Language Disorders (3)

#### Related Areas (6 units)

Special Ed 371 Exceptional Individual (3) Psychology 361 Developmental Psychology (3)

#### Clinical Practicum (17 units)

Speech Comm 458 Speech & Language Disorders in 

Speech Comm 558A Speech & Language Disorders in Adults (4)

Speech Comm 558B Diagnosis in Communicative Disorders (2)

Speech Comm 489A Public School Practicum in Communicative Disorders (4)

Speech Comm 559A Advanced Clinical Practicum in Communicative Disorders (3)

#### CLINICAL REHABILITATIVE SERVICES CREDENTIAL WITH SPECIAL CLASS **AUTHORIZATION**

This authorization is awarded to students who have earned, either previously or concurrently, the Clinical Rehabilitative Services Credential. Those who hold the SCA may teach in classrooms for the severely communicatively handicapped in the public school system. The SCA may be declared as an objective upon application to the graduate program in communicative disorders. It may also be declared as an objective at a later time as long as the student has maintained continuous enrollment in the graduate program. After the student leaves the graduate program, readmission is required in order to fulfill requirements for the SCA. It is, therefore, strongly recommended that students complete the requirements for the SCA while working on the M.A. Degree and the Clinical Rehabilitative Services Credential unless they are absolutely certain that they will not later wish to work in the severely communicatively handicapped classroom.

In addition to all the requirements for the Clinical Rehabilitative Services Credential, students must complete the following courses and student teaching practicum with a grade point average of 2.50 and at least a "C" in each.

Reading 480 The Teaching of Reading (4) Special Ed 482A Curriculum and Methods for the Learning Handicapped (3) Speech Comm 410 Teaching Language Handicapped Children (3)

#### Directed Teaching Practicum

Speech Comm 489B Public School Practicum in the Special Class (4)

# Speech Communication Courses

#### 100 Introduction to Human Communication (3)

Process variables crucial to the outcome of communication transactions. Purposes and impact of communication, attitude formation, cognitive message elements and affective message elements. Participation in research projects.

#### 102 Public Speaking (3)

Theory and presentation of public speeches, including an analysis of determinants of comprehension and attitude formation; selection and organization of speech materials, development of delivery skills and evaluation of message effectiveness. Student presentations required. Participation in research projects. (CAN SPCH 4)

#### 138 Forensics (2)

Prerequisite: consent of instructor. Investigation and practice in the background, format procedures and evaluation criteria of the various forensic events. Students must participate in at least two intercollegiate speech tournaments. May be repeated for credit. (More than 6 hours of classwork for each unit of credit)

#### 200 Human Communication (3)

Theories and competencies in interpersonal, small group, public, organizational and intercultural communication. Variations in communication process across contexts is investigated.

#### 220 Interpersonal Conflict Management (3)

Examination of the nature, causes and structure of interpersonal conflict; communication strategies exhibited in conflict; and intervention principles for conflict management. Conflict management theory will be applied to conflicts within marriages, small groups, organizations and intercultural relationships.

#### 235 Essentials of Argumentation (3)

Introduction to methods of critical inquiry and advocacy. Identifying fallacies in reasoning, testing evidence and evidence sources, advancing a reasoned position, and defending and refuting arguments. Analysis and evaluation of oral and written arguments. (CAN SPCH 6)

#### 236 Essentials of Debate (3)

Theory and practice in the activity of debate, emphasizing skill in analysis and reasoning, researching and organizing evidence, evaluating stock issues relating to policy and value propositions, and engaging in regulation.

#### 241 Introduction to Phonetics (3) (Formerly 341)

The analysis and description of speech at the segmental and suprasegmental levels. Includes practice using the International Phonetic Alphabet for broad and narrow transcription. Overview of speech production.

#### 242 Introduction to Communicative Disorders (3) (Formerly 342)

A broad overview of disorders of communication including classification and prevalence. Educational and training requirements for speech-language pathology and audiology, professional settings and opportunities, ethical considerations, clinical observa-

### 254 Nonverbal Communication (3)

(Same as Linguistics 254)

#### 300 Introduction to Research in Speech Communication (3)

Prerequisite: Speech Comm 100 or 200, open only to speech communication majors. Understanding and using professional literature in speech communication and using that literature to generate a formal research paper. A passing grade fulfills the course requirement of the university upper division baccalaureate writing requirement for speech communication majors and communicative disorders majors.

#### 302 Introduction to Manual Communication (3)

Prerequisite: consent of instructor. The basic principles of manual communication and sign language systems; fingerspelling and the development of basic sign language vocabulary in Pidgin Sign English (PSE).

#### 303 Biology of Human Communication (3)

Prerequisites: Biology 101 or Psychology 101. The exploration of the biology and evolution of speech and language. Includes speech production, evolution and development; speech perception; language, hemispheric specialization, clinical studies; current methods in neurolinguistics; and plasticity and aging.

#### 305 Liberal Studies in Communication Processes (3)

Introduction to interdisciplinary study and its relationships to communication theory. How communication occurs in various disciplines. Theories about the nature of language and how this influences the pursuit of learning. No credit for speech communication majors.

#### 307 Speech and Language Development (3) (Formerly 403)

Prerequisites: General Education I.A. or Linguistics 106 or equivalent. Normal acquisition of phonology, morphology, semantics, syntax and pragmatics in children. Includes the biological, cognitive, and social bases of language acquisition. Meets the requirements for specialized preparation to serve as a teacher of exceptional children. (Same as Linguistics 307).

#### 308 Quantitative Research Methods (3)

Prerequisite: Speech Comm 100 or 200. Current perspectives in empirical research methodology in the discipline of Speech Communication. Experimental designs, common statistical tests and the use of the computer as a research tool.

#### 312 Intermediate Sign Language (3)

Prerequisite: Speech Comm 302 or consent of instructor. A review of basic sign language. Additional sign vocabulary acquisition and improvement of basic expressive and receptive skills in the simultaneous method of communication, utilizing traditional and SEE signs.

#### 313 Interpersonal Communication Theory (3) (Formerly 415)

Prerequisite: Speech Comm 100 or 200, or consent of instructor. The behavioral and humanistic approaches to theories of interpersonal communication. Functions of communication which influence interpersonal relationships, including communicator characteristics, information exchange, situational demands and interpersonal evaluations.

### 314A Student Ambassador Program Training (1)

Prerequisites: Speech Comm 100 or 102 and consent of instructor. An intensive training course in which selected students function as public spokespersons for CSUF. Topics include: interpersonal and public communication; research and speech writing; team building; interviewing; and image management.

#### 320 Intercultural Communication (3)

Prerequisite: Speech Comm 100. Communication problems that result when members of different cultures communicate. How interpersonal communication can overcome differences in cultures' perceptions of communication's functionality, value orientations, nonverbal behavior, language, epistemologies and rhetorics.

#### 324 Small Group Communication (3)

Prerequisite: Speech Comm 100 or 200. Application of small group and interpersonal communication theory and behavioral research findings. Communication facilitation among individuals in task realization, including interpersonal needs, leadership, norms, roles, verbal and nonverbal messages, and group systems and procedures.

#### 325 Interviewing: Principles and Practices (3)

Prerequisite: Speech Comm 100 or consent of instructor. Principles and practices of interviewing processes. Consideration of appraisal, counseling, employment, exit, journalistic, persuasive and survey types of interviews. Case analyses, simulations and community fieldwork required.

#### 326 Organizational Communication Dynamics (3) (Formerly 425)

Prerequisites: Speech Comm 100 or 200 or consent of instructor. The interrelationships between management and communication theories. The microsystems and macrosystems within an organization are emphasized in terms of intrapersonal, interpersonal, small group and organizational communication theories.

#### 330 Rhetoric of Popular Culture (3)

Co-requisite: Speech Comm 200. Rhetorical theories as they apply to contemporary communication events. Various perspectives of rhetorical theory are utilized to further understanding of communication in today's society.

#### 332 Processes of Social Influence (3)

Prerequisite: Speech Comm 100 or 200. Major theories of communication concerned with influence and persuasion in society. Communication effectiveness through strategic application of theory to affecting change and evaluating appeals for change by others. Is an experience the separate passes with right of the

#### 333 Communication in Business and Industry (3)

Prerequisite: Speech Comm 100 or 200. Human behavior, structural demands and communication within organizations. Application of theory and behavioral research as a framework for generating managerial communication competencies such as interviewing, briefings, conference leadership and intergroup coordination. 19 Consistent of the particular desirable and the coordination of the co

#### 334 Persuasive Speaking (3)

Prerequisite: Speech Comm 102 or equivalent. Strategies and tactics appropriate to leading social policy persuasive campaigns. Emphasis on analysis of receiver variables, progressive use of persuasive materials, question and answer techniques, and the development of personal influence. Student presentations required.

### 335 Advanced Argumentation (3)

Prerequisite: Speech Comm 236 or equivalent. Argument as applied to advocacy; logic and evidence as related to analysis of significant issues.

#### 337 Communication in the Legal Arena (3)

Prerequisite: an upper-division writing requirement course. The influence of communication behaviors on civil and criminal judicial processes. A review and evaluation of research into communication variables and legal practices, from interviewing to closing arguments. Courtroom observation required.

338 Intercollegiate Forensics (2) Prerequisite: consent of instructor. Directed activity in debate and other forensic events. Participation in intercollegiate speech competition is required for credit. May be repeated for credit. (More than 6 hours of classwork for each unit of credit.)

#### 344 The Anatomy and Physiology of Speech and Hearing (3)

Anatomy and physiology of the speech and hearing mechanism. The processes of respiration, phonation, articulation-resonance, and hearing are included.

#### 345 Communication and Aging (3)

Prerequisite: Speech Comm 100 or consent of instructor. Communicative changes found in older adults including normal and pathologic changes in the physiological and behavioral aspects. Topics include diagnosis, rehabilitative strategies, social implications, and health care systems.

### 350 Speech and Hearing Science (3)

Prerequisites: Speech Com 241, Speech Comm 344. Introduction to physiology and acoustics of speech production including voice, resonance, and individual speech segments. Students are introduced to instrumentation for the acoustic and perceptual analysis of speech. The speech and t

### 351 Introduction to Child Language Disorders (3)

Prerequisites: Speech Comm 241, 242, and 307. Developmental and acquired language disorders in children with emphasis on the cognitive, social and neurophysiological bases of dysfunction as well as contemporary approaches to assessment and treatment.

# 404 Communicative Disorders of the Bilingual/Multicultural

Prerequisites: Speech Comm 241, 242, 307, 344, 350, 351, 471. Comparative analysis of different versus delayed or deviant speech/language development of children from various cultural, ethnic and linguistic backgrounds. Introduction to principles of clinical management of children from culturally diverse popula-

#### 410 Teaching Language Handicapped Children (3)

Prerequisites: Speech Comm 241, 242, 307, 351, and senior standing. Models for teaching language handicapped children. Includes teaching strategies, classroom management, and curriculum appropriate for language-handicapped children in special and regular classrooms.

#### 413 Communication in Interpersonal Relationships (3)

Prerequisite: Speech Comm 313. Studies of communication in the interpersonal relationship development setting with particular emphasis on current theoretical and methodological issues.

#### 420 Communication Theory (3)

Prerequisites: Speech Comm 200, 300, 308, or graduate standing, or consent of instructor. Analysis of various theories and perspectives on human communication. Attention is paid to understanding basic forms of theories and to developing students' theoretical perspectives on human communication.

#### 422 Applications of Intercultural Communication (3)

Prerequisite: Speech Comm 320. Nature and effects of intercultural communication within multicultural/multinational organizations. Examination of intercultural leadership, negotiation, decision-making, and communication competence. Analysis of and practice in a number of intercultural training approaches.

#### 430 Classical Rhetoric (3)

Prerequisites: six units of upper division coursework in Speech Comm including Speech Comm 300. Significance of rhetoric and oratory in Greek and Roman intellectual life from the 4th Century B.C. to 300 A.D. Contributors include Protagoras, Socrates, Plato, Aristotle, Cicero, Quintilian, and Augustine.

#### 432 Contemporary Rhetoric (3)

Prerequisites: six units of upper-division courses in communication theory and process to include Speech Communication 300. The nature of rhetorical theory in the 20th century.

#### 433 Training and Development (3)

Prerequisites: Speech Comm 324 or Speech Comm 326, and Speech Comm 308. Studies of communication in a training and development environment with particular emphasis on learning principles, instructional design, implementation and evaluation of training, and needs assessment.

#### 437 Internship: Speech Communication (3)

Prerequisites: any two of the following courses: Speech Comm 305, 324, 326, 333, 420 or consent of instructor. Onsite involvement with communication frameworks as they function in ongoing organizational settings. Working in an organization and seminar activities. Application for internship must be submitted prior to enrollment.

#### 438 Principles of Rhetorical Criticism (3)

Prerequisite: six units of upper-division communication theory and process courses to include Speech Comm 300. Explanation and evaluation of rhetorical experience. Historical modes of criticism, issues in rhetorical criticism, criticism in various contexts and experiences in criticism.

#### 450 Acoustic Phonetics (3) (Formerly 402)

Prerequisites: Speech Comm 241 or Linguistics 351; Speech Comm 350 or Linguistics 406; or equivalent. Overview of the acoustic characteristics of speech, song, and voice including an introduction to instrumental techniques for examining the acoustics of speech, song, and voice. Practice in the reading and interpretation of sound spectograms. (Same as Linguistics 450).

#### 458 Clinical Practicum: Speech and Language Disorders in Children (4)

Prerequisites: Speech Comm 351, 471, 476, and approved Clinical Practicum Plan. Supervised experience in the assessment and treatment of children with speech and language disorders. Weekly individual and group conferences. Approximately 40 clinical clock hours. May be repeated for credit. May not be taken concurrently with Speech Comm 558B.

#### 461 Audiology and Audiometry (3)

Prerequisites: Speech Comm 242, 344, and 350. Characteristics of hearing disorders including etiologies and risk factors. Methods and procedures used in assessing the auditory system including current topics of interest. Partially fulfills the requirements for state audiometrist certificate.

#### 465 Aural Rehabilitation (3)

Prerequisite: Speech Comm 461. Effects of hearing loss on speech and language. Treatment of hearing disorders, including amplification and aural rehabilitation. Presents information on the role of the audiologist and speech-language pathologist in the management of hearing disorders.

#### 468 Audiology Practicum (1)

Prerequisites: Speech Comm 461 and approved Clinical Practicum Plan. Audiometric evaluations including pure tone testing, hearing aid evaluations, impedance audiometry and report writing. Provides clinical clock hours in audiology.

#### 471 Clinical Phonology (3)

Prerequisites: Speech Comm 241, 242, 307, and 344. Current theories and research in clinical phonology and applied linguistics related to phonological disorders in children. Emphasis on normal development and contemporary approaches to assessment and treatment. Lecture, demonstration, and clinical observations.

#### 472 Voice and Craniofacial Disorders (3) (Formerly 443)

Prerequisites: Speech Comm 241, 242, 344, 350. Disorders of voice; disorders of articulation and resonance caused by orofacial pathology. Includes anatomical and physiological bases, assessment, diagnosis, management, and interdisciplinary aspects.

#### 473 Counseling in Communicative Disorders (3) (Formerly 453)

Prerequisite: past or concurrent enrollment in any speech/language pathology practicum. Principles and methods applicable to the speech/language pathologist in interviewing, counseling, and making referrals.

#### 474 Neurology and Neurogenic Communicative Disorders (3)

Prerequisites: Speech Comm 241, 242, 307, and 344. Anatomy and physiology of the nervous system as they relate to speech, language, hearing, and swallowing. Clinical characteristics of neurogenic language disorders, apraxia of speech, and dysarthria. Contemporary approaches to assessment and treatment. Lecture, demonstration, and clinical observations.

#### 475 Fluency Disorders (3)

Prerequisites: Speech Comm 241, 242, 307, 344 and 350. Theories of development and remission of stuttering, constitutional and environmental risk factors. Clinical characteristics of stuttering. Contemporary approaches to assessment and treatment. Lecture, demonstration, clinical observations, and exercises.

#### 476 Clinical Methods and Procedures (3)

Prerequisites: Speech Comm 241, 242, 307, 344, 351, 471, and 472 or 474 or 475. Introduction to general principles and procedures for assessment and treatment of individuals with communicative disorders. Lecture, demonstration, clinical observations, and supervised clinical experience.

#### 485 Aural Rehabilitation Practicum (1)

Prerequisites: Speech Comm 461, 465, and approved Clinical Practicum Plan. Supervised rehabilitation of hearing impaired children and adults in on- and off-campus facilities. Provides clinical clock hours in aural rehabilitation. Sign language background recommended. Credit/no credit only.

#### 489A Public School Practicum in Communicative Disorders (4)

Prerequisites: Speech Comm 559A, concurrent registration in Speech Comm 490, application approved prior to semester of practicum, 165 clock hours of clinical practice and graduate status. Meets the directed teaching requirements for the Clinical Rehabilitative Services Credential.

#### 489B Public School Practicum in the Special Class (4)

Prerequisites: Speech Comm 410, Reading 480, Special Education 482A, Speech Comm 559A; Speech Comm 489A and 490 or concurrent enrollment; approved application; and 165 clock hours of clinical practice. Meets the directed teaching requirements of Clinical Rehabilitative Services Credential Special Class Authorization.

#### 490 Seminar: Speech & Hearing Service in Schools (2)

Prerequisite: consent of instructor. Problems and challenges unique to the student clinician in the organization and management of the speech and hearing program in the school. The clinician's role; planning, scheduling, case finding, treatment program reporting and other responsibilities.

#### 492 A,B,C,D Proseminar in Speech Communication (3,3,3,3)

Prerequisite: Appropriate junior-level theoretical coursework. Current research topics in the concentration areas of persuasion and argumentation, interpersonal communication, intercultural communication, and organizational communication will be presented.

#### 492A Persuasion/Argumentation Proseminar: Political Communication

492B Interpersonal Communication Proseminar: Mediation 492C Intercultural Communication Proseminar: Japanese-

North American Communication 492D Organizational Communication Proseminar: Leadership

#### 496 Student-to-Student Tutorials (1-3)

Consult "Student-to-Student Tutorials" in this Catalog for more complete course description.

#### 499 Independent Study (1-3)

Open to upper-division students in speech communication only with signed consent form from department chair. May be repeated for credit.

#### 500 Research in Speech Communication (3)

Prerequisites: Speech Comm 300, 308, or equivalent; admission to M.A. program. Research design and methods used in historical, descriptive and experimental research in speech communication.

#### 510 Seminar in Interpersonal and Relational Communication (3)

Prerequisites: Speech Comm 324, 313 and 420 or consent of instructor. Theoretical and empirical examination of interpersonal and relational communication. Generation of theoretical frameworks and/or heuristic models of concepts and process under investigation.

#### 520 Seminar in Group Communication (3)

Prerequisites: Speech Comm 324. Small group communication theory. Small group variables, methods and outcomes, and group process as a learning tool.

#### 522 Seminar in Intercultural Communication (3)

Prerequisite: Speech Comm 320 or consent of instructor. Review of theory and methodology in intercultural communication research. Specific variables examined include attribution, values, communication competence, and accultaration/adaptation. Practice in completing original research in intercultural communication. and mosmo borgie diswedness

#### 525 Seminar in Organizational Communication (3)

Prerequisites: Speech Comm 324, 326, and 420, or consent of instructor. Theoretical postulates concerning managerial and organizational communication. Research findings and case studies relating to communication determinants and organizational effectiveness. Communicative relationships among individuals, the work unit and the organization.

#### 535 Seminar in Argumentation and Persuasion. (3)

Prerequisites: Speech Comm 332, 334, or 335 or consent of instructor. Study of leading theories and empirical research on argumentation and persuasion. Strategies of effective advocacy and compliance-gaining are examined. Course content deals with both laboratory research and applied settings. Ethical issues related to argumentation and persuasion are examined.

#### 536 Seminar in Communication and Rhetorical Theory (3)

Prerequisite: admission to the graduate program in speech communication. An analysis of rhetorical and communication theories. Comparisons and contrasts of the epistemological bases of empirical and humanistic inquiry.

#### 542 Neurologic Bases of Speech and Language (3)

Prerequisite: admission to the graduate program in communicative disorders. Functional neuroanatomy as it relates to speech production and swallowing; the neuropsychologic bases of consciousness, attention, sensation, perception, memory, higher mental functions, and language with emphasis on those aspects most relevant to the speech-language pathologist.

#### 543 Seminar in Neurogenic Speech Disorders and Dysphagia (3)

Prerequisites: Speech Comm 542; admission to the graduate program in communicative disorders or consent of instructor. Theory and clinical aspects of neurogenic speech disorders and dysphagia. Includes videofluoroscopic and clinical assessment, diagnosis, and treatment of dysphagia; assessment, diagnosis, and management of dysarthrias and apraxia of speech. Emphasis on current research on treatment efficacy.

#### 544 Seminar in Neurogenic Language and Cognitive Disorders (3)

Prerequisites: Speech Comm 542; admission to the graduate program in communicative disorders or consent of instructor. Theory and clinical aspects of neurogenic language and cognitive disorders; includes standardized and informal assessment, differential diagnosis, prognosis, treatment planning and execution, patient and family education, community re-entry, and ethical considerations.

#### 554 Seminar in Multicultural Issues in Communicative Disorders (3)

Prerequisites: Speech Comm 404 and admission to the graduate program in communicative disorders. Critical review of current theory and research on the clinical management of clients from culturally/linguistically diverse populations. Includes opportunities for practical applications of research through case study review and laboratory activities.

# 558A Clinical Practicum: Speech and Language Disorders in

Prerequisites: Speech Comm 458, 472, 474, 475, 476, admission to the graduate program in communicative disorders and approved Clinical Practicum Plan. Supervised experience in assessment and treatment of adults with speech and language disorders. Approximately 40 clinical clock hours. May be repeated for credit.

#### 558B Clinical Practicum: Diagnosis in Communicative Disorders (2)

Prerequisites: Speech Comm 476, admission to the graduate program in communicative disorders, and approved Clinical Practicum Plan. Supervised experience in assessment and diagnosis of speech and language disorders. Development of an understanding of procedures and process of clinical supervision. Approximately 20 clinical clock hours. May be repeated for credit. May not be taken concurrently with Speech Comm 458.

# 558C Clinical Practicum: Communicative Disorders in Bilingual/Multicultural Individuals (2)

Prerequisites: Speech Comm 404, 458, 558B, admission to the graduate program in communicative disorders, and approved Clinical Practicum Plan. Supervised experience in assessment and treatment of clients from culturally/linguistically diverse populations. Approximately 20 clinical clock hours. May be repeated for credit.

# 558D Clinical Practicum: Instrumental Management in Communicative Disorders (2)

Prerequisites: Speech Comm 472, 450, 558B admission to the graduate program in communicative disorders, and approved Clinical Practicum Plan. Supervised experience in assessment and treatment of clients using instrumental management; include voice, craniofacial disorders, and/or augmentative and alternative communication. Approximately 20 clinical clock hours. May be repeated for credit.

# 559A Advanced Clinical Practicum: Communicative Disorders (3)

Prerequisites: Speech Comm 542, 558A, one other seminar in communicative disorders, and approved Clinical Practicum Plan. Advanced clinical practice under supervision with children and adults. Off-campus program in hospitals, clinics, centers and other areas of rehabilitation.

# 559B Advanced Clinical Practicum: Communicative Disorders (1-3)

Prerequisite: Speech Comm 559A, approved application prior to semester of practicum, or consent of instructor. Advanced clinical practice, under supervision, in off-campus medical, clinical and community center facilities.

#### 570 Seminar in Craniofacial and Related Disorders (3)

Prerequisites: Speech Comm 472; admission to the graduate program in communicative disorders. Theory and clinical aspects of speech production associated with craniofacial disorders including cleft lip and palate. Includes clinical and instrumental assessment, diagnosis, and management strategies.

#### 571 Seminar in Fluency Disorders (3)

Prerequisites: Speech Comm 308, 473, 475, or equivalent. Employs reading assignments, seminars, lectures, and case reviews to enable students to develop a framework for understanding the etiology and maintenance of stuttering and to develop their own approaches to assessment and treatment.

#### 573 Seminar in Voice Disorders (3)

Prerequisites: Speech Comm 472, and admission to the graduate program in communicative disorders. The course reviews the classification of voice disorders (perceptually); examines instrumental assessment of such disorders (acoustically); and emphasizes a comprehensive physiological, perceptual, and acoustic work-up of individual cases.

#### 574 Seminar in Phonological Disorders (3)

Prerequisites: Speech Comm 471, and admission to the graduate program in communicative disorders. Emphasis on developing critical thinking and analytical skills related to current issues in linguistic theories on the assessment and treatment of phonological disorders in children.

# 576 Seminar in Augmentative and Alternative

Prerequisites: admission to the graduate program in communicative disorders. Historical service delivery approaches; symbol sets and systems; assessment and management strategies for persons with severe physical and speech impairments; advocacy approaches for the disabled.

#### 577 Seminar in Child Language Disorders (3)

Prerequisites: Speech Comm 351, and admission to the graduate program in communicative disorders. Principles of language assessment and intervention based upon psycholinguistic theory and current research on language disordered children. Emphasis placed on the development of critical thinking and analytical skills related to the assessment and treatment of language disorders in children.

#### 596 Directed Graduate Research (3)

Prerequisite: Speech Comm 500. Individual research study, under the supervision of the chair of the student's advisory committee.

#### 598A,B,C Thesis (2,2,2)

Prerequisite: Speech Comm 500. The selection, investigation and written presentation of a selected problem in the field of speech.

#### 599 Independent Graduate Research (1-3)

Open to graduate students only with signed consent form from department chair. May be repeated for credit.

# Speech Communication Education Courses

#### 442 Teaching Speech in the Secondary School (3)

Prerequisite: admission to teacher education. Objectives, methods and materials for teaching speech in secondary schools. Required, before student teaching, of students presenting majors in speech for the standard teaching credential.

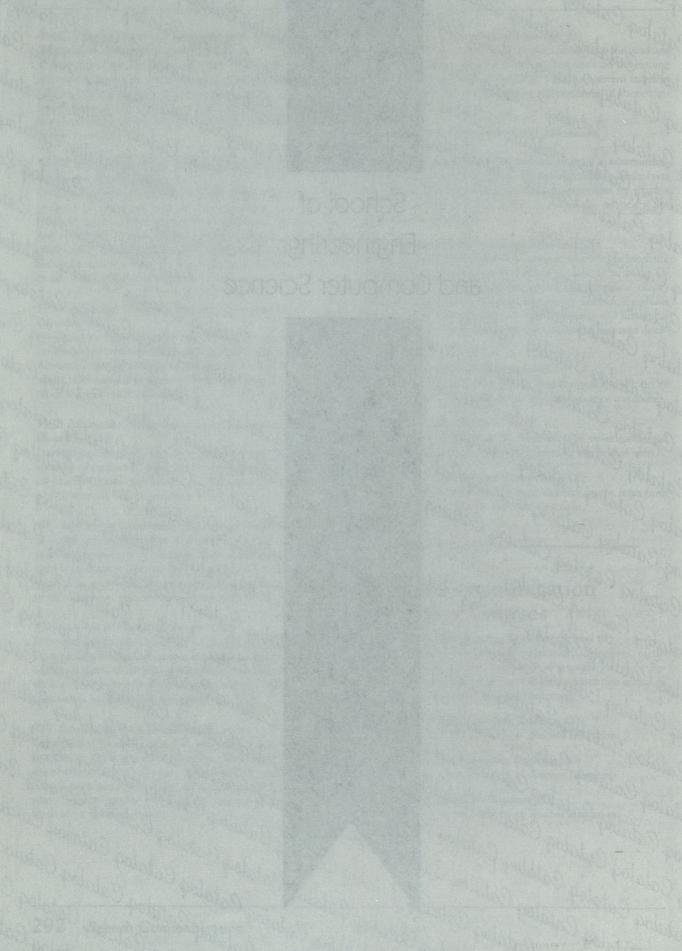
# 449E Externship in Secondary Teaching (3) See description under Division of Teacher Education.

449I Internship in Secondary Teaching (10)
See description under Division of Teacher Education.

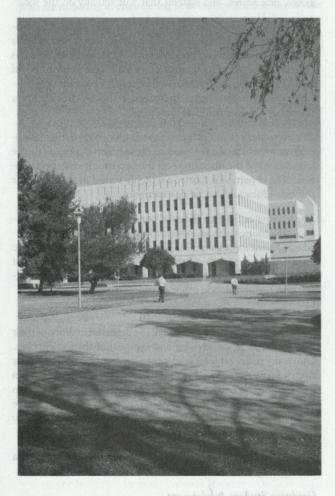
#### 449S Seminar Secondary Teaching (2)

See description under Division of Teacher Education.

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# School of Engineering and Computer Science



Dean: Andy R. Bazar

Associate Dean, Academic Affairs: Karim Hamidian (Acting)

Associate Dean, Administration: Demetrious Michalopoulos (Acting)

Assistant Dean, Student Affairs: Charlene S. Mathe Dean's Office: Computer Science 502

Programs Offered

Computer Science (B.S., Minor, M.S.)

Civil Engineering (B.S.)

Electrical Engineering (B.S.) ban games and to look of T

Mechanical Engineering (B.S.) in somethous and montanger a

Engineering (B.S.)

Option in Engineering Science to asleganto language and

Civil Engineering (M.S.) Of somethague habitating and an Ilaw

Electrical Engineering (M.S.)

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Engineering are alfiliated with one of the self.c.M) gainering

Option in Engineering Science

Mechanical Engineering (M.S.)

#### Introduction

The curricula of the School of Engineering and Computer Science are designed to prepare students for careers in engineering. and computer science, and for further study and specialization in advanced graduate work. The faculty of the school is actively involved not only in instruction and scholarship but also in the advisement of students in the school on topics relating to the planning of career and program goals. Cooperative education and internship programs are available.

#### process or structure is devised to meet a specificgniraanian.

Engineering is the application of scientific principles to the solution of practical problems. Engineers are professionals who employ the empirical art and techniques of engineering to the benefit of the society. Throughout the ages, human progress has been able to flourish due to the brilliant minds of engineers. Historical works, such as the Egyptian pyramids, the Roman aqueducts, and the Greek and Persian monuments, are examples of engineering ingenuity. In the contemporary world, the technological breakthroughs, such as computers, lasers, and robots, have become reality due to the creativity and imagination of engineers.

People-made wonders, such as the Hoover Dam, the Golden Gate Bridge, the Empire State Building, and the Gateway Arch on the Mississippi River, are examples of engineering ingenuity. Great inventors like Leonardo da Vinci, Galileo, James Watt, and Thomas Edison had exceptional engineering minds.

Engineers need a firm knowledge of the sciences and mathematics and must be able to analyze complex situations involving people, money, machines, and information in order to create workable and economical designs. Engineers often work with others in a team to develop systems and projects. The increasing technological complexity of modern society offers both opportunities as well as challenges to the engineering graduates of the future.

Engineers are employed in practically every field of human endeavor. This includes manufacturing, construction, education, government, health care, and business. As society becomes increasingly more technological, an engineering education provides a background for careers which will extend well into the 21st century. There is a real need for more engineering professionals, and so there are tremendous opportunities for everyone, including women and underrepresented minorities, in this field.

The School of Engineering and Computer Science has developed a reputation for excellence in its undergraduate and graduate engineering and computer science programs. The school is committed to providing the student with a solid preparation in the fundamental principles of engineering as an applied science as well as the practical experience to use these principles in the solution of engineering problems.

At CSUF students who are pursuing the bachelor's degrees in Engineering are affiliated with one of the school's three engineering departments: civil, electrical and mechanical engineering. These programs are accredited by the Accreditation Board for Engineering and Technology (ABET).

Each degree program incorporates the following curricular areas:

- Mathematics and basic science courses such as physics and chemistry
- Engineering science courses such as thermodynamics, materials science, and electrical circuits, which provides a bridge between basic math/science and engineering practice
- Engineering design courses in which a system, component, process or structure is devised to meet a specific need
- General education courses in the arts, humanities, and social sciences

Each undergraduate program prepares students for entry into the engineering profession or for further study and specialization in graduate study.

#### Computer Science

Computer Science deals with all phases of information including its representation, storage, structure, display and the processes by which it is transformed and used.

Computer science professionals create new systems such as an inventory control system for a large manufacturer, or a navigational system for a new space computer, or a decision support system for the management of a bank. These people use their technical skills to convert specific needs into specialized programs, procedures, and systems that will actually do the job.

Students who pursue the Bachelor of Science in Computer Science degree at CSUF are prepared for careers in a variety of fields in business, government, and industry. The curriculum, which is accredited by the Computing Sciences Accreditation Board (CSAB), emphasizes fundamental concepts exemplified by various types of programming languages, computer architectures, operating systems, and data structures.

The computer science program focuses on several curricular objectives — which are designed to provide the student with the foundations of the discipline and the opportunity for specialization. The department faculty are highly versed in the discipline through education and work experience.

The Computer Science Building houses five large computer science laboratories with an extensive range of computers and related equipment for student use. The building provides ample space for a full range of state-of-the-art systems and equipment that include parallel systems, computer networks, super-mini computers, and high-resolution color graphics.

#### Undergraduate Student Advisement

Undergraduate students should call the department office of their major to arrange for advising and approval of their study plan. University policy requires students to see an adviser each of their first two semesters and every year thereafter. Three critical times for advising are before registering for the first semester, when selecting electives for the study plan, and two semesters before graduation for a graduation check. Most departments prefer to advise their majors more frequently.

Students interested in programs in the school, but without a declared major should call the Office of the Dean for advisement.

#### Graduate Student Advisement

Graduate students should consult the graduate adviser in their major department before registering for the first semester. No more than nine units may be completed before an approved study plan is filed.

#### Program in General Education

Because of high unit requirements for the Bachelor of Science in Engineering, these programs have modified requirements for general education. Students should consult the department for requirements.

Majors in the School of Engineering and Computer Science should take mathematics and other courses in related fields early. General education courses normally should be scheduled throughout the student's program of study.

#### Minority Engineering Program (MEP)

The school sponsors a Minority Engineering Program designed to provide special academic support for underrepresented students (Black, Mexican American, Puerto Rican and American Indian) who are majoring in engineering or computer science. A summer orientation program, scheduling assistance, a study center, student tutoring, and special faculty help are provided to students in the program. Interested students should contact the dean's office for further information.

#### **MESA**

The goal of the Mathematics, Engineering, Science Achievement (MESA) Program is to increase the number of historically underrepresented minorities prepared to succeed in mathematicsbased majors in college and to increase their awareness in the

math/science fields. Private industry, CSUF and the State of California provide funding for the program. The Orange County MESA Center presently provides services to nearly 300 Black, Mexican American, Puerto Rican, and American Indian students at eleven area schools.

# Student Organizations approach biyact men a gary

There are 12 active student organizations in the school. These are student branches of American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers, Institute of Electrical and Electronic Engineers, Society of Mexican American Engineers and Scientists, National Society of Black Engineers, Society of Automotive Engineers, California Chi (Chapter of Tau Beta Pi), Society for the Advancement of Materials and Process Engineering, Society of Women Engineers, Eta Kappa Nu, and Instruments Society of America. These 12 societies form the school's Interclub Council. The ASCE student club was picked by the American Society of Civil Engineers as the number one student club in the country in 1992.

# Department of Computer Science

Department Chair: Edward Sowell Vice Chair: David Falconer

Department Office: Computer Science 522

Programs Offered Bachelor of Science in Computer Science Master of Science in Computer Science Minor in Computer Science

#### Faculty

Lance Eliot, David Falconer, James Hester, Floyd Holliday, Dorota Huizinga, Alyce Jackson, Martin Katz, Barbara Laguna, Martin Maskarinec, Demetrios Michalopoulos, Mariko Molodowitch, Nick Mousouris, Frank Pagan, Edward Sowell

#### INTRODUCTION

The undergraduate program in computer science prepares students for careers in applications programming, systems programming, and software engineering, as well as entrance into graduate and professional schools. The curriculum emphasizes fundamental concepts exemplified by various types of programming languages, computer architectures, operating systems, and data structures.

The program is accredited by the Computing Sciences Accreditation Board.

The computer science program is designed to provide the student with the foundations of the discipline as well as the opportunity for specialization. Six objectives are addressed: (1) development of the ability to work effectively as an individual or as a team member to produce correct, efficient, well-organized and documented programs in a reasonable time; (2) development of the ability to recognize problems that are amenable to computer solutions, and knowledge of the tools necessary for solving such problems; (3) development of the ability to assess the implications of work performed; (4) development of an understanding of basic computer architecture and operations; (5) preparation to pursue in-depth training in one or more application areas, or further education in computer science, and (6) development of the ability to write and speak effectively.



#### BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Each Computer Science major is required to complete a minimum of 130 units including general education. The degree program assumes that the student has already obtained a working knowledge of at least one high-level programming language such as Pascal and a working knowledge of personal computing fundamentals and applications, including word processing, spreadsheets, database systems, and presentation graphics. Students without this knowledge may be required to take up to seven additional units of coursework beyond those normally required by the major.

Courses taken toward the major or toward the requirements in related fields must be taken on a traditional (letter grade) basis, unless the course is offered only on a non-traditional (credit/no credit) basis, or if the course is passed by a challenge examination. Further, no class with a grade of "D" or lower will be counted toward the major, as a prerequisite to a course in the department, or toward the requirements in related fields. Each student is required to complete the following set of requirements.

#### Computer Science Placement Examination

Before entry into the first course required by the major (Computer Science 131), the student is required to take a placement examination or complete the required prerequisite courses offered by the department. The besseles villeged med even

### Computer Science Core (49 units)

Lower-Division Core (15 units)

Computer Sci 131 Data Structures Concepts (4)

Computer Sci 231 File System Concepts (3)

Computer Sci 241 Low-level Language Systems (3)

Computer Sci 245 Computer Logic and Architecture (3)

Computer Sci 245L Computer Logic and Architecture Laboratory (2) as domestic bewolfe ron and sine bing assisting

# Upper-Division Core (18 units)

Computer Sci 321 High-Level Language Concepts (3)

Computer Sci 331 Information Structure Concepts (3)

Computer Sci 351 Operating Systems Concepts (3)

Formal Method Concepts (3) Computer Sci 373

Computer Sci 423 Language Processor Techniques (3)

Computer Sci 461 Software Engineering Techniques (3)

## Computer Science Workshops (4 units)

Four (4) units of computer science workshop classes must be selected from Computer Science 223B-Z High-level Language Workshops, 243A-Z Low-level Language Workshops, and 253A-Z Operating System Workshops. Each student must take 223U and 253U. The remaining units of computer science workshops must be coordinated with the technical electives and approved in advance by a departmental adviser.

### Technical Electives (12 units)

Each Computer Science major must take 12 units of technical electives which must be approved in advance by a departmental adviser. These electives must be selected from upper-division courses offered by the department or upper-division courses in numerical analysis or simulation offered by closely-related departments. The electives shall constitute a coherent body of study consistent with the student's professional and educational objectives. No more than three (3) units of coursework may be selected from Computer Science courses numbered 490 through

# Requirements in Related Fields (39 units)

Mathematics Requirement (17 units)

Mathematics 150A,B Analytic Geometry and Calculus (4,4)

Mathematics 270A,B Mathematical Structures (3,3)

Mathematics 338 Statistics Applied to Natural Sciences (3)

#### Science/Quantitative Studies Requirement (14 units)

Physical Science (8 units) may a forder of the sparring assurance

One of the following combinations: (1884) 1990 as not stress

Physics 225A Fundamental Physics: Mechanics (3)

Physics 225AL Fundamental Physics: Laboratory (1)

Physics 225B Fundamental Physics: Electricity and Magnetism (3)

Physics 225BL Fundamental Physics: Laboratory (1) unit general education requirements. Iwelve of these 5 muits

Chemistry 120A General Chemistry (5)

Chemistry 125 General Chemistry for Engineers (3) 2 hourseless sint to notice

Geological Sci 101 Physical Geology (3)

Geological Sci 101L Physical Geology Laboratory (1)

Geological Sci 201 Earth History (4)

Biological Science (3)

Biology 131 Principles of Biology (3) In State Part of Sta

(Biology 101 Elements of Biology (3) or the equivalent may be substituted for 131.) somebies in mestat od sum servico

#### Science/Quantitative Studies (3 units)

A one-semester course selected with approval of adviser from the following courses:

Biology 241 Principles of Botany (4)
Biology 305 Human Heredity & Development (3)

Biology 310 Human Physiology (3) and assault and added A

Biology 319 Marine Biology (3)

Biology 404 (Evolution (3) Separate Materials A. Doninger et be

EG-GN 308 Engineering Analysis (3)

Geological Science 140 Earth's Atmosphere (3)

Geological Science 335 General Hydrology (3)

Geological Science 376 Applied Geology (3)

Management Science 362 Management Science Methods in Business and Economics (3)

Mathematics 335 Mathematical Probability (3)

Mathematics 370 Math Model Building (3)

Physical Education 349 Measurement and Evaluation in Physical Education (3)

Physics 200 Introduction to Astronomy (4)

Physics 225C Fund Physics: Waves, Options, and

Modern Physics (3) Physics 305 Acoustics (4)

Physics 380 Methods in Experimental Physics (3)

Psychology 202 Research Methods in Psych (3)

Sociology 302 Social Research Methods (3)

Speech Comm 308 Quantitative Research Methods (3)

#### Undesignated Units (8 units)

These are to be taken in related fields and/or career support fields, with prior adviser approval.

#### Upper Division Writing Requirement (3 units)

Computer Science 311, which meets the University requirements for an upper-division writing course, must be completed before the senior year.

# General Education (39 units)

Computer Science students must complete the university's 51-unit general education requirements. Twelve of these 51 units will be completed in the major's "Requirements in Related Fields." For the remaining 39 units, see the "General Education" section of this catalog.

#### MINOR IN COMPUTER SCIENCE

A Computer Science minor shall consist of 21 units of course work which shall include Computer Science 131, 231, 241; nine units of adviser-approved upper division computer science elective courses; and 2 units of programming language workshops (Computer Science 223B-Z, 243A-Z). Six units of upper division courses must be taken in residence. A minimum of 12 units, of which at least 6 must be upper division, must be distinct and different from the units used to complete the requirements for the student's major.

#### MASTER OF SCIENCE IN COMPUTER SCIENCE

#### Admission to Graduate Standing: Conditionally Classified

A bachelor's degree from an accredited institution with a grade-point average of at least 2.5 in the last 60 semester units attempted is required. Additionally, nine units of approved computer science course work with a grade-point average of at least 3.0 is required. Any deficiencies must be made up and will require six or more units of adviser-approved course work with at least a 3.0 average in addition to those required for the degree.

# Classified Graduate Standing

Achievement of this status requires the following:

- Approval of a formal study plan (see description below) by the Computer Science Graduate Committee and the dean of graduate studies.
- Satisfactory completion of no more than nine units on the study plan.
- 3. Satisfactory completion of the following courses or equivalents including prerequisites: Computer Science 231, 241, 245, 321, 331, 351, 373, 423, 431, and Mathematics 270A,B.
- 4. Competency in written communication in English must be demonstrated by a passing score on the California State University Examination in Writing Proficiency. The requirement must be satisfied before the student can be classified and before 500-level courses may be attempted. Students who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction should take English 201 and Computer Science 311 to prepare for the Examination in Writing Proficiency.

Talented professional computer scientists have traditionally come from a diversity of undergraduate preparations. The listed courses have been carefully selected to provide an adequate basis for graduate work while not unfairly precluding admission of persons without a bachelor's degree in computer science. It should be noted, however, that each of these courses has prerequisites and the student without preparation in a closely related degree may have considerable work to complete beyond the courses listed here. Reference should be made to the catalog descriptions for prerequisites of each course deficiency.

These courses and their prerequisites constitute program prerequisites. Students are not allowed to enroll in courses for which they have prerequisite deficiencies. Students with experience equivalent to any or all of these prerequisite courses are encouraged to satisfy such prerequisites by advanced placement examination. Consult the Computer Science graduate adviser for further information.

#### Study Plan

Prior to admission to classified graduate standing in Computer Science, the student with the aid of a Computer Science graduate adviser shall prepare and submit for approval by the Computer Science Department graduate committee a formal study plan consisting of a minimum of 30 units of 400 level and graduate course work.

This shall include Computer Science 412, 461, 589, 597 or 598; one of 541, 542, 543, 544, 545, 546 or 563; and 15 units of electives (9 units must be at the 500-level). At least 15 units shall represent courses offered by the Department of Computer Science 412, 461, 589, 597 or 598; one of 541, 542, 543, 544, 545, 546 or 563; and 15 units shall represent courses offered by the Department of Computer Science 412, 461, 589, 597 or 598; one of 541, 542, 543, 544, 545, 546 or 563; and 15 units of electives (9 units must be at the 500-level).

ence. Courses offered by other disciplines, not listed here, and related to the students' objectives in computer science may be approved by petition to the Department of Computer Science.

All course work in the study plan must be completed with a GPA 351. Operating Systems Concepts (3) icimo of at least 3.0.

#### Graduate Student Advisement

The graduate program adviser provides overall supervision of the graduate program. The individual student chooses an adviser from the full-time faculty of the Computer Science Department on the basis of the student's particular interests and objectives.

# Computer Science Courses

Prerequisites for computer science courses may be waived only by department petition. Prerequisite courses must be passed with a grade of "C" or better.

103 Introduction to Personal Computer Applications (3)

Introduction to use and application of personal computers: word processing, spreadsheets, database systems, computer languages. Evaluation of personal computers and software. (2 hours lecture, 2 hours laboratory)

121 Programming Concepts (4)

Prerequisite: three years high school mathematics including trigonometry. Introduction to programming of digital computers; subroutines, functions, and structure of algorithms; elementary input/output; arrays; strings, and data types. (3 hours lecture, 2 hours laboratory).

123 Programming Concepts Review (2)

Prerequisites: three years high school mathematics including trigonometry and sufficient score on Computer Science Placement Exam. Accelerated coverage of Computer Science 121 for students who wish to take Computer Science 131 but lack sufficient knowledge of Pascal.

131 Data Structures Concepts (4)

Prerequisites: Computer Science 121 or sufficient score on the Computer Science Placement Exam, high school computer applications, and three years high school mathematics including trigonometry. Data structures: linked lists, stacks, queues, arrays, sequential text files, text formatting. (3 hours lecture, 2 hours laboratory)

133 Data Structures Review (2)

Prerequisite: a sufficient score on the Computer Science Placement Exam. Accelerated coverage of Computer Science 131 for students who wish to take Computer Science 231 but lack sufficient knowledge of Ada and/or data structure.

203 Advanced Personal Computing (3)

Prerequisite: Computer Science 103. Fundamental principles of how personal computers function; networks; external storage; graphics; program design. Applications: electronic mail, drawing programs, various operating systems, graphics packages, desktop publishing. (2 hours lecture, 2 hours laboratory.)

223 High-level Language Workshops (1-3)

Workshops in the use of various high-level programming languages. Credit/No Credit only. Prerequisites and units vary.

223A Workshop in ADA (1)

Prerequisite: Computer Science 121 or General Engineering 205. May not be taken for Computer Science Department workshop credit by students who have taken Computer Science 131 with Ada. (2 hours laboratory)

223B Workshop in Advanced ADA (1)

Prerequisite: Computer Science 223A or Computer Science 131 (with Ada). (2 hours laboratory)

223C Workshop in COBOL (3)

Prerequisite: Computer Science 231. (2 hours lecture, 2 hours laboratory).

223D Workshop in PROLOG (1)

Prerequisites: Computer Science 121 or General Engineering 205 and Mathematics 270A. Workshop in Prolog (2). (2 hours labo-

223F Workshop in FORTRAN-77 (1)

Prerequisite: Comp Sci 121. Not open to students who have taken General Engineering 205. (2 hours laboratory)

223K Workshop in LISP (1)

Prerequisite: Computer Science 121 or General Engineering 205. (2 hours laboratory) as allow affiliation solo satisficación at esta

223U Workshop in C (1)

Prerequisite: Computer Science 121 or General Engineering 205. (2 hours laboratory)

223V Workshop in C + + (1)

Prerequisite: Computer Science 223U. (2 hours laboratory)

231 File System Concepts (3)

Prerequisite: Computer Science 131 with ADA or Computer Science 133 or 223A. Characteristics and utilization of bulk storage devices. B-trees and plex structures. Sequential and random access.

241 Low-level Language Systems (3)

Prerequisite: Computer Science 131. The structure of low-level computer languages. Machine, assembly, and macro language programming. Principles of assembler operation. (Same as Electrical Engineering 241) of specificacion properties have aleviants 243 Low-level Language Workshops (2)

Prerequisite: Computer Science 241. Workshops in the use of specific low-level programming languages. See list following. Offered Credit/No Credit only.

243F Workshop in 680X0 Assembly Language

243J Workshop in IBM Basic Assembly Language

243Y Workshop in 80X86 Assembly Language

245 Computer Logic and Architecture (3) (Same as Electrical Engineering 245)

245L Computer Logic and Architecture Laboratory (2)
(Same as Electrical Engineering 245L)

253 Operating System Workshops (1) Modellamod System A

Workshops in the use of specific operating systems. See list following. Offered Credit/No Credit only. Prerequisites vary. (2 hours activity)

253D Workshop in MS-DOS

Prerequisite: Computer Science 241.

253E Workshop in OS/2

Prerequisite: Computer Science 241.

253U Workshop in UNIX

Prerequisites: Computer Science 121 or General Engineering 205.

253V Workshop in VMS

Prerequisites: Computer Science 121 or General Engineering 205.

253W Workshop in VM

Prerequisites: Computer Science 121 or General Engineering 205.

311 Technical Writing for Computer Science (3)

Prerequisites: Computer Science 231, 241 and English 101. Practice in developing documentation skills as used in the computer field. Topics include proposals, feasibility studies, user guides and manuals, business communication and technical presentation. Case studies in professional ethics. Both written and oral reports are required.

313 The Computer Impact (3)

Prerequisite: upper division standing. Not for Computer Science majors. How computers are used and how this use affects organizations that use them. The side effects of innovative technology and how it changes organizations, social institutions, and human perceptions of the world we live in.

321 High-Level Language Concepts (3)

Prerequisites: Computer Science 231, 241 and at least one high-level language workshop. Language definition concepts. Data types and structures. Control structures and data flow. Run-time considerations. Interpretive languages. Introduction to lexical analysis and parsing.

331 Information Structure Concepts (3)

Prerequisites: Computer Science 231, 241. Corequisite: Mathematics 270B. Advanced data structures, sorting, searching, graph algorithms. Introduction to efficiency analysis.

351 Operating Systems Concepts (3)

Prerequisites: Computer Science 223U, 231, 241 and 253U. Resource management, memory organization, input/output, control process synchronization and other concepts as related to the objectives of multi-user operating systems. (2 hours lecture, 2 hours laboratory)

371 Introduction to Combinatorics (3) (Same as Math 371)

373 Formal Method Concepts (3)

Prerequisite: Computer Science 231 and Mathematics 270A. Algorithmic concepts; models of computation; foundations of programming languages; unsolvable problems; context-free languages, machines and grammars.

381 Knowledge Engineering (3)

Prerequisites: Completion of Critical Thinking and Mathematical Concepts of General Education Program. Understanding and intelligence within the context of knowledge engineering; knowledge structures; representative artificial intelligence programs; machine learning; effects of knowledge engineering.

411 Computers and Society (3)

Prerequisite: Computer Science 311. The developing role of computers in today's world. Effect of computers on the environments in which they are applied and public attitudes affecting computer use. Emphasis on ethical, legal and educational responsibilities of the computer professional.

412 Computer Architecture (3)
(Same as Electrical Engineering 412)

423 Language Processor Techniques (3)

Prerequisites: Computer Science 321 and 373. Concepts behind the design and implementation of programming language processors such as compilers and interpreters. The design of a small compiler from a software engineering perspective.

431 Database Systems (3)

Prerequisite: Computer Science 311 and 351. Database models; hierarchical, network, relational, functional, ERA and object-based. Distributed DBMS and concurrency control. Query optimization.

433 Data Security and Encryption Techniques (3)

Prerequisite: Computer Science 311, 351 and Mathematics 270B. System security and encryption. Current issues in security, encryption and privacy of computer based systems.

#### 435 Algorithms for Parallel Processing (3)

Prerequisites: Computer Science 223U, 253U, 331 and 351. Brief survey of parallel processing architectures; concurrent decomposition strategies for parallelizing; selected parallel algorithms from sorting, dictionary operations, matrix operations, graph algorithms, combinatorial search, and logic programming. 2 hours lecture, 2 hours laboratory.

#### 443 Commercial Programming (3)

Prerequisites: Computer Science 223C, 311, Accounting 201A, 201B. Computer programming in the commercial environment. Topics include forecasting, project planning, systems analysis, organizational and ethical impacts of computing, and the special requirements of financial systems.

#### 457 Computer Communications (3)

Prerequisite: Computer Science 351. An introduction to digital data communications. Terminology, networks and their components, common-carrier services, telecommunication facilities, terminals, error control, multiplexing and concentration techniques.

#### 459 Micro-Computer Software Systems (3)

Prerequisite: Computer Science 351 or equivalent. The design and implementation of software. Analysis of a micro-computer operating system and work on a team to implement a significant programming assignment.

#### 461 Software Engineering Techniques (3)

Prerequisites: Computer Science 311, 321, 331 and passing score on the Examination in Writing Proficiency (or equivalent). The design and development of large software systems. Organization and control of the system development process. Students will implement and discuss large scale team projects. 2 hour lecture, 2 hour laboratory.

#### 465 Principles of Computer Graphics (3)

Prerequisite: Computer Science 253U, 331 and Mathematics 270B. Examination and analysis of computer graphics; software structures, display processor organization, graphical input/output devices, display files. Algorithmic techniques for clipping, windowing, character generation and viewpoint transformation. 2 hour lecture, 2 hour laboratory.

### 471 Formal Languages and Automata (3)

Prerequisite: Computer Science 321 and 373. Finite and infinite languages; the formal relation between generators and acceptors; types of formal grammars; decidability and partial decidability.

#### 475 Analysis of Algorithms (3)

Prerequisite: Computer Science 331. Advanced techniques for solving classes of computationally complex problems. Analytic techniques for the determination of algorithm efficiency. NPcomplete problems, complexity hierarchies, and provably intractable problems.

# 477 Cybernetics and Information Theory (3)

Prerequisites: Computer Science 373 and Mathematics 250B. Formal theories underlying artificial intelligence. Cybernetics, information theory, decision models, Shannon's theorem, adaptive machines, search techniques, stochastic automata, time series analysis and reliability theory.

#### 481 Artificial Intelligence (3) has noite and example 648

Prerequisites: Computer Science 331. Use of computers to simulate human intelligence. Topics include production systems, pattern recognition, problem solving, searching game trees, knowledge representation, and logical reasoning. Programming in AI environments.

#### 483 Pattern Recognition Techniques (3)

Prerequisites: Computer Science 331, Mathematics 250B or Mathematics 270B, and 338. Classification techniques, discriminant functions, training algorithms, potential function theory, supervised and unsupervised learning, feature selection, clustering techniques, multidimensional rotations and rank ordering relations.

# 495 Internship in Computer Science (1-3)

Prerequisite: computer science or related major and consent of instructor. Practical experience relevant to computer science in government or private agencies. Written and oral reports are required.

#### 499 Independent Study (1-3)

Prerequisite: approval by the undergraduate coordinator. Special topic in Computer Science, selected in consultation with and completed under the supervision of instructor.

#### 521 Compiler Design (3)

Prerequisite: Computer Science 373 and 423 or equivalents. Techniques for the design of compilers and their relations to formal automata and formal grammars.

#### 523 Theory of Programming Languages (3)

Prerequisites: Computer Science 321 and 373. Techniques and metalanguages for the formal specification of the syntax and semantics of programming languages, and related topics. Attribute grammars, two-level grammars, grammar-based semantic specification, operational semantics, denotational semantics, continuation semantics, axiomatic semantics.

#### 531 Design of Database Management Systems (3)

Prerequisite: Computer Science 431. Implementation techniques for query analysis, data allocation, concurrency control, data structures, and distributed databases. New database models and recent developments in database technology. Student projects directed to specific design problems.

#### 541 Specification of Software Systems (3)

Prerequisite: Computer Science 461. Models and languages for software system specification, documents, standards, and traceability. Documentation of specification process.

#### 542 Software Verification and Validation (3)

Prerequisite: Computer Science 461. Theory and practice needed to ensure that a high quality software product is developed. Topics covered include a quality assessment, proof of correctness, testing, and limitations of current verification and validation methods.

#### 543 Software Generation and Maintenance (3)

Prerequisite: Computer Science 461. Software creation, reuse, enhancement, adaptation and correction. Alternatives to coding, language concepts, role of standards, style, management, tools, performance analysis, regression analysis, and productivity issues.

#### 544 Principles and Application of Software Design (3)

Prerequisite: Computer Science 461. Exploration and application of different methods and languages for expressing software design. Evaluation of designs.

### 545 Software Systems Design (3)

Prerequisites: Computer Science 351, 461 and Mathematics 270A and 270B. Development of software systems at the highest level. Systems view of software development, trade-offs between software and hardware. User interfaces, requirements analysis, techniques for development from requirements, system integration, and transition into use. Includes case studies and project.

#### 546 Software Project Management (3)

Prerequisite: Computer Science 461. Process considerations in software systems development. Mateirals and tools in software project planning. Mechanisms for monitoring and controlling software projects.

#### 551 Operating Systems Design (3)

Prerequisite: Computer Science 351 or equivalent. Design and evaluation techniques for controlling automatic resource allocation, providing efficient programming environments and appropriate user access to the system, and sharing the problem solving facilities.

#### 557 Microprogramming and Emulation (3)

(Same as Electrical Engineering 557)

#### 563T Topics in Software Engineering (3)

Prerequisites: Computer Science 461 and graduate standing in Computer Science. Current topics in software engineering such as configuration management and software engineering economy. May be repeated for credit.

#### 566 Advanced Computer Graphics (3)

Prerequisite: Computer Science 465. Three dimensional: reflection models, shading techniques, rendering process, parametic representation, ray tracing, radiosity, texture, anti-aliasing, animation, color science.

# 581T Applications of Artificial Intelligence (3)

Prerequisites: Computer Science 481 and graduate standing in Computer Science. Current applications in artificial intelligence such as fuzzy systems and machine vision. May be repeated for credit provided topic is not duplicated.

# 583 Expert Systems Design Theory (3)

Prerequisite: Computer Science 481. Knowledge representation and search strategies for expert systems; logic programming; expert system tools. Project.

#### 585 Artificial Neural Networks (3)

Prerequisite: Computer Science 481. Principles of neural networks; neural networks paradigms, software implementations, applications, comparison with statistical methods, use of fuzzy logic; project.

### 587 Natural Language Processing (3)

Prerequisite: Computer Science 481. Syntactic and semantic representations for natural languages. Topics include parsing techniques, grammers, transition networks, and contextual analysis.

#### 589 Seminar in Computer Science (3)

Limited to students who have completed at least 6 units of 500level courses in Computer Science. Current topics, research advances, updating of concepts, and verification of principles of Computer Science. Possible topics include: Large-scale parallelism; design of user interface; computers in instruction. May be repeated for credit.

#### 597 Project (1-3)

Prerequisites: classified graduate standing and approval of the computer science graduate adviser.

#### 598 Thesis (1-3)

Prerequisites: classified graduate standing and approval of the computer science graduate adviser.

#### 599 Independent Graduate Research (1-3)

Prerequisites: classified graduate standing and approval by the computer science graduate adviser. Special topic in computer science, selected in consultation with and completed under supervision of instructor.



# Departments of Engineering

Programs Offered

Bachelor Science in Civil Engineering on manager drawol and Bachelor of Science in Electrical Engineering

Bachelor of Science in Engineering

Option in Engineering Science

Bachelor of Science in Mechanical Engineering

Master of Science in Civil Engineering

Master of Science in Electrical Engineering

Option in Systems Engineering

Master of Science in Engineering

Option in Engineering Science

Master of Science in Mechanical Engineering

# INTRODUCTION SAFety of the design of the des

The undergraduate engineering programs have a broad base of science, mathematics, social sciences, humanities and engineering science, coupled with the specialization in one of the options. Students are thus prepared to enter directly into engineering practice or to continue further education at the graduate level. The Bachelor of Science Degree in Civil, Electrical or Mechanical Engineering, is accredited by the Accreditation Board for Engineering and Technology (ABET). A AAAA SOLDER SO

#### High School Preparation

The entering high school student should have a preparation which includes two years of algebra, geometry, trigonometry, and one year of physics or chemistry. Students deficient in mathematics or chemistry must take special preparatory courses, i.e., Mathematics 125 and Chemistry 115, which will not carry credit for the major. (See Mathematics Section for Entry Level Mathematics test and Math-Science Qualifying Examination requirements.)

#### or Chemistry 125 (3) or Geological Scientistry 125 (1)

A transfer student shall complete a minimum of 30 units in residence of which at least 15 shall be taken in upper-division engineering courses. Work taken at another college or university on which a grade of D was earned may not be substituted for upper-division courses.

### BACHELOR'S DEGREES IN ENGINEERING

The undergraduate curricula in engineering are comprised of four major segments. The first three segments are common to all four engineering programs, i.e. Civil Engineering, Electrical Engineering, Mechanical Engineering and the Engineering Science Option as well as the Architectural Engineering Emphasis within the Civil Engineering degree.

The first segment consists of foundation courses in mathematics and the physical sciences (33 for Electrical Engineering, 32 for Civil Engineering, and 30 for Mechanical Engineering). The second segment consists of 24 units of engineering core courses. The third segment contains 33 units of general education courses in the arts, humanities, social sciences, biological sciences and other related areas.

The fourth segment contains a sequence of courses in one of the four programs which includes a combination of required courses and adviser approved technical elective courses. The number of units in this segment is not the same for each of the four engineering programs but varies from 45 to 50 units. Students must meet with their academic adviser to prepare an approved study plan of technical elective courses prior to taking any elective courses. Undergraduate students are required to meet with their academic adviser every semester during the first year and once a year thereafter. Students are strongly encouraged to see their academic adviser frequently.

All courses taken in fulfillment of the requirements for the bachelor's degrees in Engineering must be taken for a letter grade, i.e. under grade Option 1. All mathematics and physical science courses required for the degree must be completed with at least a "C" grade to count as prerequisite courses or as credit towards the degree. Graduate courses are not open to undergraduate students without specific approval of the appropriate department chair.

#### Math and Science Foundation Courses

Mathematics 150A Analytic Geometry and Calculus (4)

Mathematics 150B Analytic Geometry and Calculus (4)

Mathematics 250A Intermediate Calculus (4)

Mathematics 250B Introduction to Linear Algebra &

Differential Equations (4)

Chemistry 120A General Chemistry (5)

Physics 225A, 225AL Fundamental Physics,

Mechanics & Lab (4)

Physics 225B, 225BL Fundamental Physics, Electricity

& Magnetism & Lab (4)

Physics 225C, 225CL Fundamental Physics, Waves,

Optics, and Modern Physics & Lab (4) (required in

Electrical, and Engineering Science)

or Chemistry 125 (3) or Geological Sciences 376 (required

in Civil Engineering).

or a Fundamental Physics course (1) (required in

Mechanical Engineering)

#### **Engineering Core Courses**

All undergraduate engineering students are required to complete the following 24 units of engineering core courses regardless of the particular program selected by the student.

EG-ME 102 Graphical Communications (3)

EG-CE 201 Statics (3)

EG-EE 203 Electrical Circuits (3)

EG-GN 205 Digital Computation (3) the Civil Engineering degree. EG-CE 302 Dynamics (3)

EG-ME 304 Thermodynamics (3)

EG-ME 306A Unified Laboratory (1)

EG-GN 308 Engineering Analysis (3)

EG-GN 314 Engineering Economy (2)

#### General Education Courses

#### Basic Subjects (9 units)

- A. Oral Communication (3 units) SPCOM 100 or SPCOM 102
- B. Written Communication (ENGL 101)
- C. Critical Thinking (3 units)

ENGL 103, PHIL 200, PHIL 210, PSYCH 110, READ 290 or SPCOM 235

#### II. Historical and Cultural Foundations (9 units)

- A. Development of Civilization (3 units) HIST 110A or HIST 110B
- B. American History, Institutions and Values
  - 1. American History (3 units) AFRO 190, AMST 201, CHIC 190, HIST 180 or **HIST 190**
  - 2. Government (3 units) POLSC 100

#### III. Disciplinary Core Courses (25 units)

- A. Mathematics and Natural Sciences (16 units)
  - 1. Physical Science CHEM 120A, PHYS 225A and PHYS 225AL.
  - 2. Biological Science (BIOL 101)
  - 4. Mathematics (MATH 150A)
- B. Arts and Humanities (6 units)
  - 1. Introduction to the Arts (3 units) ART 101, 201A, 201B, 311, 312, DANCE 101, MUSIC 100, 101, THEAT 100 or 175
  - 2. Introduction to Humanities (3 units, see Plan "B" for listing of courses)
- C. Social Sciences (3 units from EG-GN 314 and EG-CE 495 or EG-EE 370 or EG-ME 370)

#### IV. Implications, Explorations and Life-Long Learning (one course must satisfy cultural diversity requirement, i.e. an "" course)

- A. Implications and Exploration (6 units)
  - 1. Arts or Humanities (3 units, see Plan "B" listing, must be upper division)
  - 2. Social Science (3 units, see Plan "B" listing, must be upper division)

Note: In order to meet the ABET accreditation requirement for some depth in either Humanities or Social Sciences, at least two courses must be selected from the same department (one preferably a prerequisite to the other) for the above selection of courses in sections I.C., II.B.2, III.B.1, III.B.2, IV.A.1 or IV.A.2.

#### ENGINEERING SCIENCE OPTION

The Engineering Science Option program is an interdisciplinary program designed for those students who are interested in a broad education in the basic concepts and principles of engineering, rather than an in-depth study in one particular engineering discipline such as civil, electrical or mechanical engineering. The Option provides a flexible interdisciplinary program in engineering with ample opportunity to develop a study plan which meets specific career goals. Courses can be selected from engineering, computer science, the physical sciences, mathematics and business to meet a special and specific engineering science objective.

Students who wish to be considered for an undergraduate or graduate engineering science program should meet with the Associate Dean of the School of Engineering and Computer Science. The Associate Dean may serve as the academic adviser to the student or one or more advisers from the engineering, computer science, physical sciences, mathematics or the business faculties may be selected if appropriate.

#### Bachelor of Science in Engineering Option in **Engineering Science**

The degree consist of 33 units of mathematics and physical science courses, 24 units of engineering core courses, 33 units of general education courses and 45 units of adviser approved elective courses for a total of 135 units. The adviser approved electives must include a component of engineering design courses and engineering laboratory courses.

#### Master of Science in Engineering Option in Engineering Science

The degree consist of 30 units of adviser approved 400 and 500 level courses. At least half the units required for the degree must be graduate 500 level courses. A segment of the 30 units must include a math-oriented course as well as EG-GN 403 Computer Methods in Numerical Analysis (3).

#### INTERNSHIPS IN ENGINEERING

Internships for Engineering provide practical work experiences which integrates with and supplements the student's academic studies. Internship jobs are coordinated through the Center for Internships and Cooperative Education. In order to participate in this program a student must register for EG-GN 495 Professional Practice (1) for each semester of internship participation.

# General Engineering Courses

General engineering courses are courses whose academic content is not specific for any of the engineering disciplines. The courses are not administered by any one particular department. General engineering courses are taught by faculty from all three of the engineering departments. A Department Charles and Consequence Offices Engineering and Consequence of Consequenc

Although there is no degree program in general engineering, new students who do not indicate a specific engineering option will be classified as a general engineering major. The Associate Dean of the School of Engineering and Computer Science serves as the academic adviser to all general engineering students. General engineering students should make every effort to declare a major in one of the four engineering programs after one or two semesters of course work.

#### 205 Digital Computation (3)

Prerequisite: college algebra or three years of high school mathematics including a second course in algebra. Computers and their numerical applications. Elementary FORTRAN programming language, digital computation methods in statistics and solving algebraic equations.

# 308 Engineering Analysis (3)

Prerequisites: Physics 225B, Math 250B or equivalent. Fundamentals and engineering applications of Fourier series, Fourier transforms, Laplace transforms, complex analysis, vector analysis; engineering applications.

# 314 Engineering Economy (2) Sun Sunday & Shall especial

Prerequisite: upper-division standing in engineering. Development, evaluation and presentation of alternatives for engineering systems and projects using principles of engineering economy and cost benefit analysis.

#### 403 Computer Methods in Numerical Analysis (3)

Prerequisites: Math 250B and EG-GN 205 or equivalent. The use of numerical methods and digital computers in the solution of algebraic, transcendental, simultaneous, ordinary and partial differential equations.

### 495 Professional Practice (1)

Prerequisite: upper-division standing in engineering. Professional engineering work in industry or government. Written report required. May be repeated for credit. Applicable towards bachelor's degree programs. Not for credit in the graduate program.

# Department of Civil Engineering

Department Chair: Pinaki R. Chakrabarti Department Office: Engineering 100D

#### Faculty

Dario Aristizabal, Richard Brock, Pinaki Chakrabarti, George Chiang, George Lin, William Litle, Chandrasekhar Putcha, Dindial Ramsamooj, Mahadeva Venkatesan

#### Advisers

Undergraduate adviser: George Lin Graduate adviser: Pinaki R. Chakrabarti

#### INTRODUCTION

The civil engineering program at CSUF includes the fields of structural, geotechnical, hydraulic, environmental, construction, and architectural engineering. Modern civil engineering practices rely heavily upon computer-aided analysis and design, and students at CSUF use both microcomputers and the mainframe computer.

"Structural" engineers are designers of buildings, bridges, dams, power plants, offshore structures and many other kinds of systems. These engineers determine, usually by computer analysis, the forces that a structure must resist, the appropriate materials, and the possible structural types. Structural engineers usually work with a team that includes architects, mechanical and electrical engineers, contractors, and the owner of the project.

"Geotechnical" engineers analyze the properties of soils and rocks that affect the behavior of structures. They evaluate the potential settlements of buildings, the stability of slopes and fills, and the effects of earthquakes. They take part in the design and construction of foundations, including those of offshore platforms, tunnels and dams.

"Hydraulic" engineers deal with all aspects of the physical control of water. They work to prevent floods, develop irrigation projects, design hydroelectric power systems, manage and train rivers, and predict water runoff.

"Architectural" engineering is a subtle combination of the art of architecture and the science of engineering. The architect conceives of structures as an art form, and relies upon the structural engineer to translate his concepts of beauty into structural reality. The architectural engineer has the training to interact with both architects and engineers or to work on his own in designing structures that combine both strength and beauty.



"Construction engineering and management" is a wide ranging specialization that uses both technical and management skills to plan and build public and private projects and commercial developments.

"Environmental engineering" is concerned with the design and control of projects related to environmentally-sensitive areas (primarily air pollution hazardous waste management). They also regulate and enforce many federal and state laws to control damage to the environment.

#### BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Mathematics and science foundation courses (32 units)
See information under "Departments of Engineering" section.

#### Engineering core courses (24 units)

See information under "Departments of Engineering" section.

#### Upper Division Writing Requirement

In addition to the Examination in Writing Proficiency which is to be taken as soon as 60 units are completed, six units from the following courses are required and must be passed with a grade of C or better. The laboratory reports are graded on English composition as well as content.

EG-ME 306A	Unified Laboratory (1)
EG-CE 324L	Soil Mechanics Laboratory (1)
EG-CE 325L	Structural Analysis Laboratory (1)
EG-CE 377	Civil Engineering Materials Lab (1)
EG-CE 428L	Engineering Hydraulics Lab (1)
EG-CE 431L	Advanced Structural Lab (1)
EG-CE 465	Planning & Control of Engineering
	Construction Projects (3)
EG-CE 468	Engineering Construction (3)
EG-CE 495	Civil Engineering Professional Practic

Required Cou	arses in Civil Engineering (37 units)
EG-EE 203L	Electric Circuits Laboratory (1)
EG-CE 214	Engineering Surveying (2)
EG-CE 214L	Engineering Surveying Laboratory (1)
EG-CE 301	Mechanics of Materials (3)
EG-CE 324	Soil Mechanics (3) vol 2000) emulsing bevorages
EG-CE 324L	Soil Mechanics Laboratory (1)
EG-CE 325	Structural Analysis (3)
EG-CE 325L	Structural Analysis Laboratory (1)
EG-CE 330	Computer Applications in Civil Engineering (3)
EG-CE 377	Civil Engineering Materials Lab (1)
EG-CE 408	Reinforced Concrete Design (3)
EG-CE 418	Foundation Design (3)
EG-CE 428	Engineering Hydraulics (3)
EG-CE 428L	Engineering Hydraulics Lab (1)
EG-CE 430	Structural Steel Design (3)
EG-CE 494	Design of Civil Engineering Structures (3)*
EG-CE 494L	Civil Engineering Structural Laboratory (1)*

EG-CE 495 Civil Engineering Professional Practice (1)

e (1)

### Technical Electives in Civil Engineering (8 units)

Before enrolling in any elective course approval of the adviser must be obtained. Technical Electives must include 441 or 465 or 468.

EG-CE 401	Reliability Analysis and Design (3)
EG-CE 411	Structural Dynamics (3)
EG-CE 431L	Advanced Structural Laboratory (1)
EG-CE 432	Computer-Aided-Design in Structural
	Engineering (3)
EG-CE 435	Design of Hydraulic Structures (3)
EG-CE 436	Engineering Hydrology (3)
EG-CE 441	Environmental Engineering (3)
EG-CE 465	Planning and Control of Engineering
	Construction Projects (3)
EG-CE 468	Engineering Construction (3)
EG-CE 493	Structural Systems for Buildings (3)
EG-CE 497	Senior Projects (1-3)
EG-CE 499	Independent Study (1-3)

#### ARCHITECTURAL ENGINEERING EMPHASIS

Mathematics and Science Courses (32 units)

Engineering Core Courses (24 units)

#### Required Civil Engineering Core (29 units)

The state of the s	
EG-EE 203L	Electric Circuits Laboratory (1)
EG-CE 214	Engineering Surveying (2)
EG-CE 214L	Engineering Surveying Laboratory (1)
EG-CE 301	Mechanics of Materials (3)
FO OF 224	0 111 1 1 (2)

EG-CE 324 Soil Mechanics (3) EG-CE 324L Soil Mechanics Laboratory (1)

EG-CE 325 Structural Analysis (3) EG-CE 325L Structural Analysis Laboratory (1)

EG-CE 377 Civil Engineering Materials Laboratory (1)

EG-CE 408 Reinforced Concrete Design (3)

EG-CE 430 Structural Steel Design (3)

EG-CE 494 Design of Civil Engineering Structures (3)
EG-CE 495 Civil Engineering Professional Practice (1)

# Core Courses for the Emphasis in Architectural Engineering (13 units)

EG-CE 431L Advanced Structural Laboratory (1) EG-CE 432 Computer-Aided-Design in Structural

Engineering (3)

EG-CE 441 Environmental Engineering (3) EG-CE 493 Structural Systems for Buildings (3)

EG-CE 496 Architectural Design (3)

# Technical Electives for the Emphasis in Architectural Engineering (3 units)

EG-CE 465 Planning and Control of Engineering Construction Projects (3)

<sup>\*</sup>EG-CE 494 and 494L must be taken together.

#### MASTER OF SCIENCE IN CIVIL ENGINEERING

The Master of Science degree in Civil Engineering is intended to meet the needs of students who wish to prepare for careers in areas such as project management, design and analysis of complex systems (including structures such as tall buildings and bridges), consulting, and research. This program also provides excellent preparation for doctoral studies.

The program provides advanced study within the area of civil engineering and allows students to elect coursework, with adviser approval, in the areas of structural, hydraulics/hydrology, geotechnical, engineering mechanics, construction engineering and management or environmental engineering.

Graduates from the M.S. program have obtained employment in various fields including manufacturing, construction, business, education and government.

### Admission Requirements

To qualify for admission in conditionally classified standing, applicants must meet the following University and departmental requirements:

- 1. Bachelor's degree from a regionally accredited institution.
- 2. Bachelor's degree in civil engineering from an institution accredited by the Accreditation Board of Engineering and Technology (ABET).
- 3. Minimum grade-point-average of 2.5 in the last 60 semester
- 4. Good standing at the last institution attended.

Students meeting the above requirements will be admitted to the graduate program in civil engineering and will be advanced to classified standing immediately after filing an adviser-approved study plan in the civil engineering departmental office.

Students not meeting the above requirements may be admitted at the discretion of the department chair and will be required to take an additional six or more units of adviser-approved prerequisite coursework. The student must demonstrate potential for graduate study by earning a G.P.A. of 3.0 or higher in these prerequisite courses.

Any student entering the Master of Science degree program without a B.S. in Civil Engineering also will be required to complete deficiency courses prior to beginning coursework for the master's degree.

Graduate and postbaccalaureate students who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must receive a minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

The Civil Engineering department does not require the Graduate Record Exam (GRE).

# Classified Standing

Students meeting the following additional requirements will be advanced to classified standing and are eligible to take graduate courses for which they are qualified.

- 1. Completion of all deficiency work specified by the graduate adviser with a grade of "B" or better.
- 2. Development of an approved study plan. Before completing nine units at CSUF toward the M.S. degree, the student must meet with an adviser for preparation of a study plan which must be approved by the department chair and Dean of Graduate Studies.
- 3. Fulfillment of the University Writing requirement prior to completing nine units at CSUF toward the M.S. degree. Students must demonstrate writing ability commensurate with the baccalaureate degree by successfully completing one of the following:
  - A. An upper-division writing requirement at any CSU campus
  - B. An upper-division writing course from another university which is equivalent to a course satisfying the CSUF Upper-Division Writing Requirement. Equivalency must be certified by the department chair
  - C. Cal State Fullerton Examination in Writing Proficiency
  - D. A CSUF upper-division or graduate level course that is certified as meeting the writing requirement and is approved by the department chair. The grade received must be a C or better.

#### Study Plan

The study plan consists of a minimum of 30 units of adviserapproved upper-division or graduate level course work which must be completed with an overall grade-point average of at least 3.0. At least half the units required for the degree must be in approved graduate (500-level) courses.

#### Required Courses (6 units)

EG-GN 403 Computer Methods in Numerical Analysis (3) and additional adviser-approved math-oriented course (3) or six units adviser approved electives.

#### Concentration Courses (15 units)

A student is required to select a minimum of 15 units in Civil Engineering. These units may be 400-level and 500-level courses and are selected according to the student's areas of interest. Course work may focus on the following areas: Engineering Mechanics, Geotechnical Engineering, Hydraulics/Hydrology, Structural Engineering, Construction Engineering and Management, and Environmental Engineering. "BG-CE 494 and 4941 tours to given 6 nations

#### Other Courses (9 units)

Elective units should be taken in Civil Engineering or a related engineering field and are subject to adviser approval.

#### Exam/Thesis/Project Option

Subject to approval by the department chair, students may select one of the following options for final review by a department committee:

Oral comprehensive examination or EG-CE 598 Thesis or EG-CE 597 Project

Students enrolling in less than six units of Independent Study/ Thesis/Project will be required to take an oral comprehensive exam. Students enrolling in six units of thesis or project may defend their thesis or project instead of taking an oral comprehensive exam.

# Advancement to Candidacy (1) vsolother advantage 3 824

Advancement to candidacy and completion of requirements for the degree include:

- 1. Filing a graduation check prior to the beginning of the final semester (deadlines are listed in the class schedule).
- 2. Completion of study plan course work with a minimum overall grade-point-average of 3.0.
- 3. Successful completion of a comprehensive examination or oral defense of a thesis or project.
- 4. Recommendation by the Civil Engineering department faculty and Dean of Graduate Studies.

# Civil Engineering Courses

#### 201 Statics (3)

Prerequisites: Math 150B and Physics 225A. Vectorial treatment of statics of particles and rigid bodies. Freebody diagrams. Applications to problems of equilibrium (two and three dimensions) of structural and mechanical force systems. Centroids and moments of inertia. (CAN ENGR 8) and see blind somblind to nonthing

#### 214 Engineering Surveying (2)

Prerequisite: EG-ME 102; corequisite: EG-CE 214L. Measurement of horizontal distance, difference in elevation, and angles. Analyses and adjustments for systematic and random measurement errors. Traverse surveys and computations. Horizontal and vertical curves. Principles of stadia. Topographic surveys. Earthwork.

# 214L Engineering Surveying Laboratory (1)

Corequisite: EG-CE 214. Field practice of measurement of distance with a chain and stadia, horizontal and vertical angles with a theodolite, closed traverse, differential leveling, horizontal and vertical curve layout and locating stakes for highway construction. (3 hours laboratory)

#### 301 Mechanics of Materials (3)

Prerequisites: Math 250A and EG-CE 201. Stress and deformation analysis for axial load, torsion, flexure, and combined forces. Analysis of simple statically indeterminate structures. Stability of columns. Strain energy & ultimate resistance. Interactive relationships between analysis & design.

#### 302 Dynamics (3)

Prerequisites: Math 250A and EG-CE 201. Kinematics and kinetics of particles and rigid bodies, Newton's laws, work and energy, impulse and momentum. Solution of problems using vector approach.

#### 324 Soil Mechanics (3)

Prerequisite: EG-CE 301. Soil properties and soil action as related to problems encountered in engineering structures; consolidation, shear strength, stability and lateral earth pressures.

### 324L Soil Mechanics Laboratory (1)

Prerequisite: English 101. Corequisite: EG-CE 324. Behavior and properties of soils. Application to foundation design, liquefaction and seepage.

### 325 Structural Analysis (3)

Prerequisite: EG-CE 301. Analysis of forces and displacements in statically determinate and indeterminate elastic structures by force and displacement methods. Approximate methods of analysis. Influence lines and applications. Matrix formulation of structural analysis and computer applications.

#### 325L Structural Analysis Laboratory (1)

Prerequisite: English 101. Corequisite: EG-CE 325. Principles of model analysis and similitude. Influence lines for reactive and internal forces; generalized displacements of statically indeterminate structures. Nonprismatic members. (3 hours laboratory)

#### 330 Computer Applications in Civil Engineering (3)

Prerequisites: EG-GN 205, EG-CE 214, EG-CE 324 and EG-CE 325. Application of computer programming to the solution of problems in various branches of Civil Engineering.

#### 332 Mechanical and Electrical Systems for Buildings (3)

Prerequisites: EG-EE 203 and EG-ME 304. Energy Overview: thermal control, water and waste, fire protection, electricity, illumination, signal equipment, transportation, acoustics.

#### 377 Civil Engineering Materials Laboratory (1)

Prerequisite: EG-CE 324, EG-CE 325. Behavior and properties of most common materials used in engineering and construction, eg. steel, concrete, wood, masonry and asphalt. Principles of mix design of asphalt and concrete. Application of strain gages to find strain and stress. Testing of specimens according to ASTM. Determination of material properties. (3 hours laboratory)

#### 401 Reliability Analysis and Design (3)

Prerequisites: EG-CE 301. Application of probabilistic concepts to Civil Engineering structures. Various methods of quantifying reliability-numerical methods and Monte Carlo methods. Application to tension elements, simply-supported and cantilever beams, columns and portal frames.

#### 408 Reinforced Concrete Design (3)

Prerequisites: EG-CE 325. Design for bending, shear, axial forces, combined loading. Design of beams, columns, slabs for ultimate strength and serviceability requirements; alternate design method. Prestressed concrete design. Design project of buildings or bridges to standards of professional practice.

#### 410 Applied Fracture Mechanics (3)

Prerequisites: EG-CE 325, EG-GN 308. Principles of Fracture Mechanics. Numerical fracture modelling. Applications in buildings, bridges, nuclear power plants, geomechanics and pavement design.

#### 411 Structural Dynamics (3)

Prerequisites: EG-CE 325 and EG-GN 308. Free and forced vibrations of discrete and continuous systems. Matrix formulation and normal coordinates analysis. Response of structures to impulse and earthquake loads.

#### 418 Foundation Design (3)

Prerequisites: EG-CE 324 and 408. Design of footings and retaining walls. Mat and piled foundations for structures. Design project to standards of professional practice.

#### 428 Engineering Hydraulics (3)

Prerequisite: EG-CE 302. Incompressible fluid flow in closed circuits and open channels. Hydrostatics, energy, and hydraulic grade lines. Momentum, friction formulas, pipelines, pumps, pipeline networks, uniform flow, critical flow, hydraulic jump, specific energy, nonuniform flow, and water surface profiles.

#### 428L Engineering Hydraulics Laboratory (1)

Prerequisite: English 101 and EG-CE 428. Introduction to experimental hydraulics in open channel and pipe flows including measurements of discharge, depth, velocity, force and friction coefficients. Hydraulic model laws and report writing. (3 hours laboratory)

#### 430 Structural Steel Design (3)

Prerequisite: EG-CE 325. Design for bending, torsion, shear, axial forces, combined loadings. Design of built-up girders, composite construction. Design of shear and moment connections. Design project of buildings or bridges to standards of professional practice.

#### 431L Advanced Structural Laboratory (1)

Prerequisites: EG-CE 324L, 325L, and 408. Fundamentals of earthquake engineering and soil structure interaction; design of lateral bracing for model buildings. (3 hours laboratory)

### 432 Computer-Aided-Design in Structural Engineering (3)

Prerequisites: EG-GN 205, EG-CE 325 and EG-CE 408. Application of computer-aided design techniques with automated graphics to the design of civil engineering structures. Design project to the standards of professional practice (2 hours lecture, 3 hours laboratory).

#### 435 Design of Hydraulic Structures (3)

Prerequisite: EG-CE 428. Applications of hydraulic principles to design of various structures including spillways, energy dissipators, outlet works, storm drains, culverts and water distribution systems. Use of computers in design process.

#### 436 Engineering Hydrology (3)

Prerequisite: EG-CE 428. Hydrologic cycle with applications to hydrologic design of engineering structures. Rainfall, stream flow, ground water, surface runoff, hydrographs, flood routing, frequency distributions and design hydrographs.

#### 441 Environmental Engineering (3)

Prerequisite: Biology 101, EG-CE 324, EG-CE 428 and senior standing in Engineering. Corequisite: EG-CE 324L. Planning and control of the environment; wastewater treatment and disposal; solid waste management; air pollution; radiation protection; housing and residential environment.

#### 465 Planning and Control of Engineering Construction Projects (3)

Prerequisites: senior standing in Civil Engineering. Overview of construction project management; construction scheduling fundamentals: bar charts, CPM, PERT; schedule control: manual vs. computer systems, reports, schedule maintenance; cost control: code of accounts, control base, budgets, forecasting, reports, computer systems; applications in construction projects."

#### 468 Engineering Construction (3)

Prerequisites: EG-CE 408 or equivalent. Corequisite: EG-CE 418. Engineering construction planning equipment and methods. Construction management. Critical path method. Construction of buildings, bridges, highways, foundations and dams.

#### 481 Solid Waste Technology and Management (3)

Prerequisite: EG-CE 441. Process dynamics and kinetics; thermal, physical, chemical and biological treatment operations; immobilization process; residual management and treatment process train selection.

#### 482 Liquid Waste Technology and Management (3)

Prerequisite: EG-CE 441. Process dynamics; reactions and kinetics; reactor engineering and process design; pretreatment operations and physical, chemical and biological treatment operations; residual management and treatment process train selec-

#### 493 Structural Systems for Buildings (3)

Prerequisites: EG-CE 408 and 430. Corequisite: EG-CE 418. Building structural systems and their behavior under loads. Foundation systems. Roof, floor, wall systems. Construction and cost considerations. Design project to standards of professional practice. (2 hours lecture and 3 hours laboratory.)

#### 494 Design of Civil Engineering Structures (3)

Prerequisites: EG-CE 408 and 430. Corequisite: EG-CE 418. Timber, reinforced masonry, reinforced concrete and steel design. Uniform Building Code, design of buildings. Design projects to standards of professional practice. (2 hour lectures; 2 hour laboratory)

#### 494L Civil Engineering Structural Laboratory (1)

Corequisite: EG-CE 494. Design of bridges according to AASHTO code. Design project to the standards of professional practice. (3 hours laboratory)

#### 495 Civil Engineering Professional Practice (1)

Prerequisite: senior standing. Discussion of civil engineering as a profession and the civil engineer as a professional. Career opportunities in private sectors and government. Office and field practice. Professional growth and development. Project management. Business management and opportunities.

#### 496 Architectural Design (3)

Prerequisites: EG-CE 408 and 432. Systems based design process: aesthetic, functional, environmental, and behavioral aspects. Urban planning and design. Case studies. Architectural design project to the standards of professional practice.

#### 497 Senior Projects (1-3)

Prerequisites: senior standing in engineering and formal approval by adviser and department chair. Independent design projects. Formal report to be submitted after completion of project work.

#### 499 Independent Study (1-3)

Prerequisites: senior standing in engineering and formal approval by adviser and department chair. Special topics in civil engineering. Formal report to be submitted after completion of independent study.

#### 509 Theory of Plates and Shells (3)

Prerequisite: EG-ME 438 or equivalent. Theory of thin plates subjected to transverse loads. Analysis of plates of circular, rectangular and other shapes. Theory of thin shells. Shells of revolution. Shells of translation.

# 510 The Finite Element Method (3)

Prerequisites: EG-CE 517 and 533. Formulation of finite elements for analysis of plane stress and strain problems, axisymmetric bodies, plates and shells. Conforming and non-conforming shape functions. Computer applications to complex structural systems under static and dynamic loads.

### 515 Geo-Environmental Engineering (3)

Prerequisite: EG-CE 436. Geo-environmental properties and soil action related to problems encountered in waste management engineering; physico-chemical soil properties, shear strength as applied to landfill design and lateral earth pressures on braced excavation; contaminant migration and partitioning in unsaturated soils.

# 517 Theory of Elasticity (3)

Prerequisite: EG-ME 438 or equivalent. Analysis of stress and strain. Equations of elasticity. Extension, torsion and flexure of beams. Two-dimensional elastostatic problems. Variational methods and energy theorems. Elementary three-dimensional elastostatic problems. Introduction to thermoelasticity and wave propagation.

#### 525 Thermoelasticity (3)

Prerequisite: EG-ME 438 or equivalent. Basic theory of thermoelasticity, heat conduction, thermal stress analysis for elastic systems, thermal stress analysis for inelastic systems. (Same as EG-ME 525)

#### 532 Earthquake Engineering (3)

Prerequisites: EG-CE 411 and 533 or equivalent. Earthquake motions; response spectra; computational methods and computer applications for response of structural systems. Energy absorption capacity of materials and structural components. Soil structure interaction. Seismic design and evaluation of current building codes.

#### 533 Matrix Methods of Structural Analysis (3)

Prerequisites: EG-CE 325 and EG-GN 403. Matrix formulation of structural analysis using the direct stiffness approach. Computer aided analysis of complex structural systems under static and dynamic loads. Stability analysis. Introduction to the finite element method.

## 534 Construction Methods and Equipment for Buildings (3)

Prerequisites: EG-CE 408 and 430. Methods and equipment for construction of high-rise buildings, space structures, folded plates, shells, and suspension systems. Modularization. Quality control and construction failures.

#### 537 Groundwater and Seepage (3)

Prerequisite: EG-CE 436. Equations governing flow of liquid in porous media. Seepage through dams and under structures, flow in confined and unconfined aquifers, steady and unsteady flow, well fields, flow nets, computer solutions, sea water intrusion, recharge, groundwater pollution.

#### 538 Construction Methods and Equipment for Heavy Construction Engineering (3)

Prerequisites: EG-CE 408 and 418. Methods and equipment for construction of foundations, highways, airfields, bridges, ports, harbors, dams, nuclear power plants and industrial facilities. Quality control and construction failures.

#### 539 Preconstruction Design Evaluation (3)

Prerequisites: EG-CE 534 and 538 or equivalent. Cost benefit, preconstruction scheduling, and constructibility modifications in design, specifications and construction methods. Value Engineering.

#### 540 New Technology & Innovations in Construction Engineering (3)

Prerequisite: EG-CE 534 or 538 or equivalent. Automation and robotics in construction. New materials, construction equipment and methods for construction of dams, highways, and buildings. Latest computer applications in construction.

#### 544 Advanced Foundation Engineering (3)

Prerequisites: EG-CE 418 or equivalent. Beam on elastic foundations. Raft foundations. Retaining walls. Pile groups and pier foundations. Soil structure interaction. Foundations on expansive soils.

#### 548 Soil Dynamics and Foundation Engineering (3)

Prerequisites: EG-CE 411, 418, and EG-ME 438 or equivalent. Wave propagation in soils. Blast effects. Analysis and design of dynamically loaded foundations. Earthquake design of dams and foundations of structures.

# 549 Theory of Elastic Stability (3)

Prerequisite: EG-CE 509, 517 or equivalent. Critical buckling loads of columns, beam-columns, frames, plates, and shells. Lateral stability of beams. Torsional buckling of open wall sections.

#### 550 Major Commercial Project Development and Management (3)

Prerequisite: Management 444. Process of major commercial project development; macroeconomics aspects; project initiation and implementation, construction management systems, schedule, cost and quality control, control of long-lead equipment and materials, construction disputes and claims, case studies.

### 562 Space Structures (3)

Prerequisite: EG-CE 411, 408, 430, 510. Development of innovative space structures and systems. Constitutive properties of materials. Structural analysis of large-scale flexible structures. Deflection and vibration control. Applications in aerospace structures, offshore structures, high-rise buildings, public arenas and long-span bridges.

#### 563 Design of Prestressed Concrete Structures (3)

Prerequisite: EG-CE 408 or 463. Prestressed concrete theory. Continuous prestressed concrete members, flat plate systems, virendeel systems, application of unbonded postensioning-Theory and design. Yield line theory, limit analysis and cracking of concrete. Design of prestressed dome roof, barrel shell and hyperbolic paraboloid shell.

#### 566 Design of Tall Buildings (4)

Prerequisite: EG-CE 408, 533 or equivalent. Characteristics, design criteria and safety provisions of tall buildings. Selection, optimization and analysis of framing systems. Design standards, constructability, wind and seismic considerations. Design project to the standards of professional practice.

#### 575 Expert Systems in Construction Engineering (3)

Prerequisite: EG-CE 330. Expert systems and artificial intelligence techniques in construction engineering; expert systems for: safety evaluation of structures during construction, site selection, construction decision making, and construction schedule analysis; project monitoring; claims and disputes.

#### 597 Project (1-3)

Prerequisites: classified graduate status and formal approval of Civil Engineering Graduate Committee, graduate adviser and department chair.

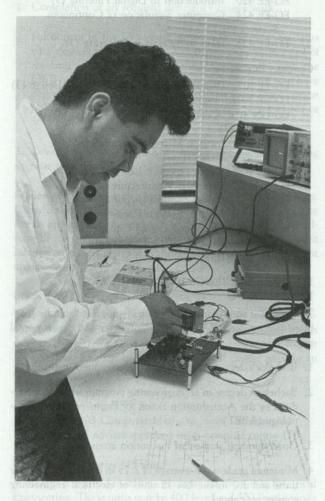
# 598 Thesis (1-6)

Prerequisites: classified graduate status and formal approval of Civil Engineering Graduate Committee, graduate adviser, and department chair. (Max. of 3 units per semester.)

## 599 Independent Graduate Research (1-3)

Prerequisites: classified graduate status and formal approval of Civil Engineering Graduate Committee, graduate adviser, and Prerequisites (100 model 12 Systems aestherie, functional, environmental, and department chair.

# Department of Electrical Engineering



Department Chair: Vacant Department Office: Engineering 100A

#### Faculty

Susamma Barua, Magsood Ahmed Chaudhry, Ning Chen, Hwang Chung, John Clymer, George Cohn, Shahin Ghazanshahi, Mohinder Grewal, Karim Hamidian, Hassan Hamidi-Hashemi, Eugene Hunt, Harriet Kagiwada, Jack Kemmerly, Young Kwon, Allan McDonald, Rao Nuthalapati, Chennareddy Reddy, Mostafa Shiva, Richard Shubert, Srini Srinivasan, Fleur Tehrani, Jesus Tuazon

#### Advisers

Undergraduate program adviser: Chennareddy Reddy Graduate program coordinator: Jesus Tuazon

All department full-time faculty serve as advisers; see electrical engineering bulletin board for names, office hours and room EG-EE 370 Sets in Electrical Broadward Street Street Broadward Broadward Street Broadward Broadward

### INTRODUCTION

The Bachelor of Science degree in Electical Engineering is accredited by the Accreditation Board for Engineering and Technology. The electrical engineering program provides the students with the basic and advanced topics in the areas of design and analysis of digital and analog electronic circuits, design and analysis of computer architecture, microprocessors, communication networks and control systems. This program develops an ability to apply design and analysis knowledge to the practice of electrical engineering in an effective and professional manner. This knowledge can be applied to various engineering practices in aerospace, computer, electrical, electronics and other applied fields.

#### BACHELOR OF SCIENCE IN ELECTRICAL **ENGINEERING**

See "Departments of Engineering" for requirements in mathematics and science foundation courses (33 units), engineering core courses (24 units) and general education coursework.

#### Upper-Division Writing Requirement

In addition to the Examination in Writing Proficiency (EWP), all of the following courses are required to fulfill the upperdivision English writing requirement:

EG-ME 306A Unified Laboratory (1) EG-EE 310L Electronic Circuits Laboratory (2) EG-EE 313L Machine and Analog Computer Laboratory (1)

EG-EE 384 Intro to Electronic Design (1) EG-EE 385 Electrical Engineering Design Projects Laboratory (2) or EG-EE 307L Digital Computer Design Lab (3) in lieu of EG-EE 384 and 385.

Written work for these courses must meet the professional standards.

#### Required Courses in Electrical Engineering (38 units)

Enrollment in these courses is limited to students who meet the prerequisites.

EG-EE 203L Electric Circuits Lab (1)

EG-EE 245 Computer Logic & Architecture (3)

EG-EE 245L Computer Logic and Arch Lab (2)

EG-EE 303 Electronics (3)

EG-EE 303L Electronics Lab (1)

EG-EE 309 Network Analysis (3)

EG-EE 310 Electronic Circuits (3)

EG-EE 310L Electronic Circuits Lab (2)

EG-EE 311 Field Theory and Transmission Lines (3)

EG-EE 313 Intro to Electromechanics (3)

EG-EE 313L Machine and Analog Computer Lab (1)

EG-EE 323 Engineering Probability and Statistics (3)

EG-EE 370 Sem in Electrical Engineering (1)

EG-EE 384 Intro to Electronic Design (1)

EG-EE 385 Electrical Engineering Design Projects Lab (2)

EG-EE 409 Introduction to Linear Systems (3)

EG-EE 445 Digital Electronics (3)

#### Technical Electives in Electrical Engineering (7 units)

Before enrolling in any elective course, approval of the adviser must be obtained. At least two units of design content must be included.

#### Electronics:

EG-EE 404 Intro to Microprocessors and

Microcomputers (3)

EG-EE 404L Microprocessor Laboratory (1)

EG-EE 410 Electro-Optical Systems (3)

EG-EE 442 Electronic Circuits (3)

EG-EE 445L Pulse and Digital Circuits Lab (2)

EG-EE 448 Digital Systems Design (3)

EG-EE 455 Solid State Electronics (3)

EG-EE 465 Introduction to VLSI Design (3)

### Electronic Communications:

EG-EE 420 Introduction to Digital Filtering (3)

EG-EE 442 Electronic Circuits (3)

EG-EE 443 Electronic Communication Systems (3)

EG-EE 445L Pulse and Digital Circuits Lab (2)

EG-EE 448 Digital Systems Design (3)

#### Control Systems:

EG-EE 404 Intro to Microprocessors and

Microcomputers (3)

EG-EE 416 Feedback Control Systems (3)

EG-EE 416L Feedback Control Systems Lab (1)

EG-EE 420 Introduction to Digital Filtering (3)

EG-EE 424 Computer Simulation of Continuous

Systems (3)

EG-EE 425 Intro to Systems Engineering (3)

#### Computer Engineering:

EG-EE 307 Digital Computer Organization & Design (3)

EG-EE 307L Digital Computer Design Lab (3)

EG-GN 403 Computer Methods in Numerical

Analysis (3)

EG-EE 404 Intro to Microprocessors and

Microcomputers (3)

EG-EE 404L Microprocessor Lab (1)

EG-EE 412 Computer Architecture (3)

EG-EE 420 Introduction to Digital Filtering (3)

EG-EE 425 Intro to Systems Engineering (3)

EG-EE 445L Pulse and Digital Circuits Lab (2)

EG-EE 448 Digital Systems Design (3)

EG-EE 465 Introduction to VLSI Design (3)

#### MASTER OF SCIENCE IN ELECTRICAL **ENGINEERING**

To qualify for admission in conditionally classified standing, applicants must meet the following University and departmental requirements:

- 1. Bachelor's degree from a regionally accredited institution
- 2. Bachelor's degree in an engineering program which is accredited by the Accreditation Board for Engineering and Technology (ABET)
- 3. Good standing at the last institution attended
- 4. Minimum grade-point-average of 2.75 in the last 60 semester units and 3.0 in the last 15 units of electrical engineering courses attempted

Students with grade deficiencies, degrees from non-ABET accredited universities, or undergraduate majors other than Electrical Engineering may be considered for conditional admission. However, any deficiencies must be made up prior to advancing to classified standing and prior to beginning course work for the master's degree. Requirements for fulfilling deficiencies include a minimum of six units of adviser-approved course work. Deficiencies must be completed with at least a 3.0 grade-point average.

Each applicant file will be reviewed by the department graduate program adviser. Upon admission, the applicant is urged to make an appointment with the graduate program adviser. The program adviser will assign a faculty adviser based on the student's areas of interest and career objectives.

#### Classified Standing

A student who meets the above requirements for admission to conditionally classified standing may be granted classified standing contingent upon:

- 1. Completion of all required deficiency course work
- 2. Fulfillment of the University writing requirement. Students with degrees from American universities must show proof of meeting an upper-division writing requirement, pass the EWP, or complete ENGLISH 301 or 360. Students who have degrees from foreign universities must pass the Examination in Writing Proficiency (EWP) or complete ENGLISH 301 or 360 with a grade of "C" or better.
- 3. Development and approval of a study plan prior to completing nine units toward the 30-unit degree requirements

Students must meet with a faculty adviser to set up a study plan. Classification is not granted until the study plan is approved by the faculty adviser, the department chair, and the Dean of Graduate Studies. Any subsequent changes to the study plan must have prior written approval by the faculty adviser and department chair.

#### Study Plan

The study plan consists of a minimum of 30 units adviserapproved upper-division and graduate level course work which must be completed with an overall grade-point average of at least 3.0. At least half the units required for the degree must be in approved graduate (500-level) courses.

#### Required Courses (6 units)

EG-GN 403 Computer Meth. in Num. Analysis (3) Additional adviser-approved math-oriented course (3)

#### Concentration Courses (15 units)

A student is required to select a minimum of 15 units in Electrical Engineering. These units may be 400-level and 500-level courses and are selected according to the student's area of interest. Course work may focus on the following areas: Computer Engineering, Control Systems, Communications Systems/Signal Processing, Microelectronics and Circuit Theory, Electromagnetic Field Theory and Application, and Systems Engineering.

### Other Courses (9 units)

Elective units should be taken in Electrical Engineering or a related engineering field and are subject to adviser's approval.

#### Exam/Thesis/Project Option

Subject to approval by the faculty adviser, students may select one of the following options for final review by the department graduate committee:

Satisfactory completion of a final oral comprehensive examination

or EG-EE 598 Thesis (6 units) (1) attended alertical B

or EG-EE 597 Project (3 units)

A typed draft of the thesis or project report must be submitted to the student's thesis or project committee no later than four weeks prior to the last day of the semester in which the oral defense of the thesis or project report is scheduled.

The thesis or project committee consists of a minimum of three members of the Electrical Engineering faculty. The thesis should cover original research and be prepared according to the university guidelines. Committee review for the project will be directed in part toward defense of the project report and in part toward an oral examination related to course work. Guidelines for the preparation of theses and formal reports are available in the Electrical Engineering departmental office and the university Graduate Studies office.

Students requesting course work as an independent study (EG-EE 599) must complete an independent study application form and submit it for approval to the supervising faculty member and department chair prior to the semester in which the course work is to begin.

#### Advancement to Candidacy

Advancement to candidacy requires that the student file a graduation check prior to the beginning of the final semester (see class schedule for deadlines). Completion of requirements for the degree include a minimum GPA of 3.0 on all study plan course work, successful completion of a comprehensive examination or oral defense of a thesis or project, and recommendation by the Electrical Engineering faculty and Dean of Graduate Studies.

#### MASTER OF SCIENCE IN ELECTRICAL ENGINEERING OPTION IN SYSTEMS ENGINEERING

Students seeking this option must meet the same requirements as the Option in Electrical Engineering. In addition students selecting the systems engineering option will be required to include these five courses in their study plans:

EG-EE 580 Analysis of Random Signals (3)

EG-EE 581 Theory of Linear Systems (3)

Linear Estimation Theory (3) EG-EE 582

EG-EE 585 Optimization Techniques in Systems

Engineering (3)

EG-EE 587 Operational Analysis Techniques in Systems Engineering (3)

The remainder of the systems engineering study plan will include other engineering courses with an emphasis in a particular field such as information systems, control theory, computer systems, civil or mechanical engineering applications. Students possessing a Bachelor of Science in Engineering may elect to include up to nine units from approved subjects offered by the School of Business Administration and Economics as a part of their study plan.

# **Electrical Engineering Courses**

203 Electric Circuits (3)

Prerequisites: Physics 225B; Math 250A; Prerequisite or corequisite: EG-GN 205. Units; Ohm's and Kirchhoff's laws; mesh and nodal analysis, superposition; Thevenin and Norton theorems; RL and RC transients; phasors and steady state sinusoidal analysis; response as a function of frequency; current, voltage, and power relationships; polyphase circuits. (CAN ENGR 12; 203 + 203L = CAN ENGR 6

#### 203L Electric Circuits Laboratory (1)

Prerequisite or corequisite: EG-EE 203. Electrical measurement techniques; verification of basic circuit laws for resistive, RL, and RC circuits. (3 hours laboratory) (203 + 203L = CAN ENGR 6)

# 241 Low-Level Language Systems (3)

(Same as Computer Science 241)

#### 245 Computer Logic and Architecture (3)

Prerequisites: EG-GN 205 or equivalent or Computer Science 131 for Computer Science majors. Logical design and organization of the major components of computer, analysis and synthesis of combinatorial and sequential logics, analysis of the arithmetic, memory control and I/O units, concepts in computer control. (Same as Computer Science 245)

#### 245L Computer Logic and Architecture Lab (2)

Prerequisite or corequisite: EG-EE 245. Digital logic circuits; decoders, counters, serial and parallel adders, control circuits (1 hour lecture, 3 hours laboratory). (Same as Computer Science

#### 300 Electronic Instrumentation (3)

Prerequisite: EG-EE 203: Characteristics of semiconductor diodes and transistors; operational amplifiers, summers, integrators and analog filters; comparators and waveform generators; instrumentation amplifiers, digital logic and memory circuits, counters, multivibrators, analog-to-digital converters; transducers; electronic measurement systems. (For Mechanical Engineering majors.)

#### 300L Electronic Instrumentation Laboratory (1)

Prerequisite or corequisite: EG-EE 300. Measurements using analog electrical meters and oscilloscope; semiconductor devices and circuit application with emphasis on instrumentation methods using common transducers; operational amplifier applications: digital logic gates and flip-flops; analog-to-digital converters and displays. (3 hours laboratory) (For Mechanical Engineering majors.)

#### 303 Electronics (3)

Prerequisites: Physics 225C and EG-EE 203. Characteristics and elementary applications of semiconductor diodes, field-effect transistors and bipolar-junction transistors, and operational amplifiers; mid-frequency small-signal analysis and design of transistors.

#### 303L Electronic Laboratory (1)

Prerequisite: EG-EE 203L and English 101. Corequisite: EG-EE 303. Experimental study of semiconductor diodes, transistors, and analysis and design of elementary electronic circuits. (3 hours laboratory)

#### 307 Digital Computer Organization and Design (3)

Prerequisite: EG-EE 245. Organization and design of major components of a digital computer including arithmetic, memory, input, output and control units. Integration of units into a system and simulation by a computer design language.

#### 307L Digital Computer Design Laboratory (3)

Prerequisites: EG-EE 303L, 245L. Prerequisite or corequisite: EG-EE 307. Design and implementation of a small digital computer; adders, arithmetic unit, control unit, memory control unit, memory unit and program unit. May be taken in lieu of EG-EE 384 and 385. (1 hour lecture, 6 hours laboratory)

#### 309 Network Analysis (3)

Prerequisites: EG-EE 203 and EG-GN 308. Performance of RLC circuits; complex frequency and the s-plane; frequency response and resonance; network topology; two-port network characterization; classical filter theory.

#### 310 Electronic Circuits (3)

Prerequisites: EG-EE 303 and 309. Continuation of 303, analysis and design of multistage and feedback amplifiers; frequency characteristics of amplifiers, frequency characteristics and stability of feedback amplifiers, differential amplifiers, design of IC circuit biasing, operational amplifiers and their applications.

#### 310L Electronic Circuits Lab (2)

Prerequisite: EG-EE 303L. Prerequisite or corequisite: EG-EE 310. Single or multistage and feedback amplifiers; linear and digital integrated circuits, ADC and DAC design project. (3 hours laboratory, 1 hour lecture.)

#### 311 Field Theory and Transmission Lines (3)

Prerequisites: Physics 225B and Math 250B. Electrostatics and magnetostatics; boundary value problems; magnetic materials and the magnetic circuit; magnetic induction; Maxwell's equations and the formulation of circuit concepts; transmission lines.

#### 313 Introduction to Electromechanics (3)

Prerequisites: EG-EE 309 and 311. Electromagnetic fields and circuits; transformers, saturation effects. Simple electro-mechanical systems. Circuit models, terminal characteristics and applications of DC and AC machines.

#### 313L Machine & Analog Computer Lab (1)

Prerequisite: EG-EE 303L. Prerequisite or corequisite: EG-EE 313. Filter and dynamic systems simulation using analog computer; transformers and AC and DC machines (3 hours laboratory).

#### 323 Engineering Probability and Statistics (3)

Prerequisite: Math 250A. Set theory: axiomatic foundation of probability; random variables; probability distribution and density functions; joint, conditional, and marginal distributions; expected values; distribution of functions of random variables; central limit theorem; estimation.

### 370 Seminar in Electrical Engineering (1)

Prerequisite: senior standing in engineering. The engineering profession, professional ethics, and related topics.

#### 384 Introduction to Electronic Design (1)

Prerequisite or corequisite: EG-EE 310L. Investigate basic building blocks, and design selected systems in electrical engineering. Each student will design a specific system or project which will be fabricated in the EG-EE 385 design projects course.

#### 385 Electrical Engineering Design Projects Laboratory (2)

Prerequisite: EG-EE 384. Continued design and fabrication of a project or system in electrical engineering. Learn the practical aspects of design and project construction. (6 hours laboratory)

#### 404 Introduction to Microprocessors and Microcomputers (3)

Prerequisites: EG-EE 245. Hardware and software concepts in microprocessors, processor family chips, system architecture, CPU, input/output devices, interrupts and DMA, memory (ROM, RAM), electrical and timing characteristics, assembly language programming.

#### 404L Microprocessor Laboratory (1)

Prerequisite: EG-EE 245L. Prerequisite or corequisite: EG-EE 404. I/O interfacing with a microprocessor system; familiarization with the operating system, assembler, debugger and emulator; design of keyboard, LCO display, PS 232, D/A converter, A/D converter and floppy disk interfaces. (3 hours laboratory)

#### 409 Introduction to Linear Systems (3)

Prerequisites: EG-EE 309. Development of time and frequency domain models for physical systems. The linearization process and representation with block diagrams and signal flow graphs; discrete-time systems and digital signals including use of Z-transforms; stability theory of continuous and discrete time systems.

#### 410 Electro-Optical Systems (3)

Prerequisite: EG-EE 311. Introduction to electro-optics; optical radiation characteristics and sources; geometrical and physical optics; lasers and electro-optical modulation; quantum and thermal optical radiation detectors; detector performance analysis; electrooptical systems modeling and analysis; application examples.

#### 412 Computer Architecture (3)

Prerequisites: EG-EE 245. Modern architectures of computer systems, their CPU structure, memory hierarchies and I/O processors; conventional and microprogrammed control; high-speed and pipelined ALU; cache, virtual and interleaved memories, DMA, interrupts and priority. (Same as Computer Science 412.)

### 416 Feedback Control Systems (3)

Prerequisites: EG-EE 409 and EG-CE 302. Feedback control system characteristics; stability in the frequency domain; analysis and design of continuous-time systems using root-locus, Bode and Nyquist plots and Nichols chart.

#### 420 Introduction to Digital Filtering (3)

Prerequisite: EG-EE 409. Discrete-time signals and systems; solution of difference equations; Fourier transform for a sequence; Ztransform; discrete Fourier transform; FIR and IIR realizations; design of digital filters.

#### 424 Computer Simulation of Continuous Systems (3)

Prerequisites: EG-GN 205 and 308. Use of the digital computer for simulation of physical systems modeled by ordinary differential equations; problem formulation, in-depth analysis of two integration methods, and the use of a general purpose system simulation program such as CSSL.

#### 425 Introduction to Systems Engineering (3)

Prerequisites: EG-GN 205 and EG-GN 308. Introduction to systems engineering analysis and the systems approach; introduction to modeling, optimization, design and control; systems requirements analysis; analytical and computational solution methods; information processing; integrated systems.

#### 442 Electronic Circuits (3)

Prerequisite: EG-EE 310. Power amplifiers and tuned amplifiers; RF amplifiers; modulation and detection circuits; oscillators; and operational amplifier applications.

#### 443 Electronic Communication Systems (3)

Prerequisites: EG-EE 310 and 323. Principles of amplitude, angular and pulse modulation, representative communication systems, the effects of noise on system performance.

#### 445 Digital Electronics (3)

Prerequisites: EG-EE 303 and EG-EE 245. RC circuits, attenuators, compensation and scope probe. Logic circuits: DTL, TTL, STTL, LSTTL and ECL. Fanout, noise-immunity, switching speed, power consumption, input-output characteristics. Design and analysis of MOS logic circuits; PMOS, NMOS and CMOS gates, flip-flops, shift registers and memory circuits.

#### 445L Pulse and Digital Circuits Laboratory (2)

Prerequisite or corequisite: EG-EE 445. Design and analysis of various logic circuits, DTL, TTL, STTL, LSTTL, CMOS gates. Design of timing circuits and special waveform generating circuits. (1 hour lecture, 3 hours laboratory)

#### 448 Digital Systems Design (3)

Prerequisites: EG-EE 303 and EG-EE 245. Basic concepts and characteristics of digital systems, traditional logic design, LSI/VLSI logic design, combinational and sequential logic, and their applications; timing and control, race conditions and noise, microcomputers, computer-aided programming, development systems, microcomputer system hardware design, input/output devices.

#### 455 Solid State Electronics (3)

Prerequisites: EG-EE 303 and 311. Quantum mechanical principles, atomic structure, crystal structure, crystal defect and diffusion, lattice vibration and phonons, energy band theory, charge transport phenomena, free electron theory of metal, intrinsic and extrinsic semiconductors, p-n junction theory, transistor theory.

#### 465 Introduction to VLSI Design (3)

Prerequisite: EG-EE 245 and EG-EE 303. Computer aided design of VLSI circuits. MOS device structure, design rules, layout examples, CMOS standard cells. Speed power trade off, scaling, device and circuit simulation. VLSI design software tools. Routing method system design, Design Project. Chip fabrication through MOSIS service, testing.

#### 480 Engineering Optics (3)

Prerequisite: EG-EE 311 or Physics 225C. Engineering aspects of the optics of planar interfaces; geometrical optics of devices; interference of beams at parallel interfaces; linear system transforms; diffraction, polarization, coherence; practical optical elements; laboratory demonstrations and significant coverage of engineering applications.

### 497 Senior Project (1-3)

Prerequisite: consent of adviser and instructor. Directed independent design project.

# 499 Independent Study (1-3)

Prerequisite: approval of study plan by adviser. Specialized topics in engineering selected in consultation with and completed under the supervision of the instructor. May be repeated for credit.

#### 503 Information Theory and Coding (3)

Prerequisite: EG-EE 323. Information measures, probabilistic studies of the transmission and encoding of information, Shannon's fundamental theorems, coding for noisy channels.

#### 504A Linear Network Synthesis (3)

Prerequisite: EG-EE 310. Synthesis of passive element drivingpoint and transfer-functions with emphasis on RC networks. Basic operational amplifier RC circuits and their performance limitations, introduction to second-order RC active filters. Parameter sensitivity analysis. ( animato larigid base salut 1744

#### 504B Linear Active Networks (3)

Prerequisite: EG-EE 504A. Cascade realizations of RC active filters utilizing low-gain and infinite-gain amplifiers; state-variable filter realizations of high-Q filters; gyrators and generalized impedance converters. RC filters using active feedforward and feedback circuits. 2889 28539 09 6 8 8 9 9 9 9 9 9 9 9 9

### 507 Detection Theory (3) street per box ferromenidates and

Prerequisite: EG-EE 580. Formulation of decision rules for the detection of signals in a noisy environment, optimum receivers. Estimation of parameters of detected signals. Estimation theory.

#### 510 Optics & Electromagnetics in Communications (3)

Prerequisite: EG-EE 480. Plane-wave propagation and reflection from multiple layers; two- and three-dimensional boundary value problems; waveguides and resonant cavities; radiation from apertures and antennas; electromagnetic properties of materials, gases, and plasmas; significant coverage of engineering applications.

#### 512 Advanced Optics and Fields (3)

Prerequisite: EG-EE 510. Engineering aspects of vector potentials in field problems; electromagnetic theorems; scattering of light and electromagnetic waves by obstacles; integral equations and the moment method of solution; Green's functions and Strum-Liouville problems; significant coverage of engineering applications.

#### 514 Introduction to Optical Electronics (3)

Prerequisite: EG-EE 510. Rays and Gaussian beams in media, optical elements, and optical waveguides; optical resonators and laser oscillation; second harmonic generation and parametric oscillation; electro-optic modulation of beams; interaction of light and sound; propagation, modulation, and oscillation in waveguides; applications.

#### 516 Fourier Optics and Holography (3)

Prerequisite: EG-EE 510. Fourier analysis and sampling in two dimensions; Fourier transforming and imaging properties of lenses; frequency analysis of imaging systems; spatial filtering and optical information processing; wavefront-reconstruction imaging and holography; significant coverage of laboratory demonstrations and engineering applications.

#### 517 Superconductive Effects and Devices (3)

Prerequisite: EG-EE 510. Properties and models of superconductors, associated fields, and circuits from the perspective of electrical engineering; applications of the classical model; London and Schrodinger equations; electrodynamics and flux quanta; Josephson tunneling and quantum interference; superconducting junctions and other devices.

#### 518 Digital Signal Processing I (3)

Prerequisite: EG-EE 420. Discrete Fourier transform; fast Fourier transform; Chirp Z-transform; discrete time random signals; floating-point arithmetic; quantization; finite word length effect in digital filters; spectral analysis and power spectrum estimation.

#### 519A Hypercube Multiprocessing and Applications (3)

Prerequisite: EG-EE 412. The system architecture and application of hypercubes; the node processor, floating point accelerator, communication circuits, synchronization, routing and message-passing algorithms, process decomposition and load balancing, a hands-on parallel programming experience on Hypercube Parallel Processing System.

### 519B Multiprocessing and Computer Networks (3)

Prerequisite: EG-EE 519A. Advanced topics in computer architecture design to increase computing through-put and efficiency through multiprocessing, ditributed processing, array and pipeline processors, and computer networks.

#### 520 VLSI Architectures for Signal Processing (3)

Prerequisites: EG-EE 412 and EG-EE 518. Computational and architectural needs of signal processing, signal processing algorithms, concurrent array processors, mapping signal processing algorithms onto array processors (APs), systolic, engagement and wavefront APs, implementation and applications to signal/ image/speech processing.

#### 521 Digital Image Processing (3)

Prerequisite: EG-EE 420. Digital Image Fundamentals, Image Transforms, Image Enhancement, Spatial and Frequency Domain Methods, Histograms, Image Smoothing, Image Encoding Principles, and Fundamentals of Image Segmentation, Representation and Description.

#### 522 Spread Spectrum Communications (3)

Prerequisites: EG-EE 443 and 580. Introduction to Spread Spectrum (SS) Systems. Performance analysis of coherent digital signaling schemes. Synchronization. Direct sequence, frequency hopping, time hopping, and Hybrid Spread Spectrum Modulations. Binary shift register sequences. Code tracking loops. Performance of SS systems in a jamming environment, with forward error correction.

#### 523A Solid State Devices and Integrated Circuits (3)

Prerequisite: EG-EE 455. Solid state fabrication technologies: diffusion, epitaxy, metallization, photo-lithography. Solid state device design principles; diodes, transistors, FETS, linear integrated circuits, digital integrated circuits.

#### 523B Large Scale Integrated Circuits (3)

Prerequisites: EG-EE 445 and 455. Design and analysis of large scale integrated circuits. p- and n-channel MOS circuits; complementary MOS circuits; static and dynamic circuits; integrated injection logic circuits; shift register design; read-only memory and random access memory design; computer-aided and other logic circuit design.

#### 523L Integrated Circuit Laboratory (1)

Prerequisite or co-requisite: EG-EE 523A. VLSI fabrication processes; diffusion, oxidation, metallization, photolithographic pattern definition, etching. Device layout design: Device fabrication of MOS transistor, junction diode, diffused resistors.

#### 526 Digital Control Systems (3)

Prerequisite: EG-EE 416. Analysis, design and implementation of digital control systems; Z-transform methods; frequency domain and state-space approach for discrete-time systems.

#### 527 Fault Diagnosis and Fault-Tolerant Design (3)

Prerequisite: EG-EE 307. Fault diagnosis and fault-tolerant design of digital systems; fault diagnosis test for combinational and sequential circuits, reliability calculations, multiple hardware redendancy, error detection and correcting codes, software redundancy and fault-tolerant computing.

# 529 Principles of Neural Systems (3)

Prerequisites: EG-EE 310 and 409. Principles of neural systems and their hardware implementation. Basic properties, discrete and continuous bildirectional associative memories. Temporal associative memories. Neural nets classifiers, perceptrons, supervised and unsupervised learning. Forward and backward propagation. Electrical models of neural networks using op-amp., analog VLSI.

#### 531 Phase-Locked and Frequency Feedback Systems (3)

Prerequisite: EG-EE 580 or consent of instructor. Theory of noise and linear systems, FM feedback principles. Theory and design of phase-locked loops and their applications in communication and

#### 533 Adaptive Signal Processing (3)

Prerequisites: EG-EE 420. Theory of adaptation with stationary signals, adaptive algorithms and architectures, engineering applications such as system modeling and identification, channel equalization in communication systems, interference cancelling, beamforming.

#### 552A Biomedical System Analysis (3)

Prerequisites: EG-EE 409 and 323 and one undergraduate biology survey course. System Identification and Modeling, Analysis of Biomedical Signals, Parametric Methods and Parameter Estimator, Non-parametric Methods of Linear and Non-Linear Systems, Volterra and Wiener Models, "phase-space" models, Estimation of Kernel functions and Operational Surfaces, Computational Aspects, Applications to Biomedical Systems.

#### 552B Biomedical System Analysis (3)

Prerequisite: EG-EE 552A. Non-linear system analysis and synthesis, mathematical theories and simulation techniques for modeling physiological systems, non-linear with emphasis on respiratory and cardiac output control systems, non-linear mathematical models of cardioresporatory systems analysis of the simulation results.

#### 557 Microprogramming and Emulation (3)

Prerequisite: EG-EE 307. An introduction to microprogramming concepts and applications to the control unit of a computer, digital control systems, interpretations, translation and emulations. (Same as Computer Science 557)

#### 558A Microprocessors and System Applications I (3)

Prerequisites: EG-EE 404 and 404L. Microprocessors and microcomputers, their related software systems, system design with microprocessors, applicants in peripheral controllers, communication devices and multiprocessing systems.

#### 558B Microprocessors and Systems Applications II (3)

Prerequisite: EG-EE 558A. Advanced microprocessor architecture and their applications to microcomputer networking; RISC VS CISC architectures, communication protocol, distributedoperating system, and local area networks.

# 559 Introduction to Robotics (3)

Prerequisite: EG-EE 416 or consent of instructor. The science of robotics from an electrical engineering standpoint, including modeling, task planning, control, sensing and robot intelligence.

### 572 Topics in Control Theory (3)

Prerequisites: EG-EE 581 and consent of instructor. Offered once each year with course content varied. Topics: system identification, numerical methods for optimal control computations, nonlinear system theory, and advanced digital control. May be repeated for credit with consent of instructor.

#### 580 Analysis of Random Signals (3)

Prerequisites: EG-EE 409 and 323. Random processes pertinent to communications, controls and other physical applications, Markov sequences and processes, the orthogonality principle.

#### 581 Theory of Linear Systems (3)

Prerequisites: EG-GN 403 and EG-EE 416. State space analysis, linear spaces, stability of systems; numerical methods of linear systems analysis and design.

# 582 Linear Estimation Theory (3)

Prerequisites: EG-EE 580 and 581. Mathematical models of continuous-time and discrete-time stochastic processes; the Kalman filter, smoothing and suboptimal filtering computational studies.

558A Microprocessors and System Applications (A)1 8402

#### 585 Optimization Techniques in Systems Engineering (3)

Prerequisite: EG-GN 403. Calculus of variations, optimization of functions of several variables, Lagrange multipliers, gradient techniques, linear programming, and the simplex method, nonlinear and dynamic programming.

### 587 Operational Analysis Techniques in Systems Engineering (3)

Prerequisites: EG-EE 323 and 585. Operational research models; applications of probability theory to reliability, quality control, waiting line theory, Markov chains; Monte Carlo methods.

#### 597 Project (1-3)

Prerequisite: consent of adviser. Classified graduate students only.

#### 598 Thesis (1-6)

Prerequisite: consent of adviser. Classified graduate students only.

# 599 Independent Graduate Research (1-3)

Prerequisite: Consent of adviser. May be repeated for credit.

# Department of Mechanical Engineering



Department Chair: Sundaram Krishnamurthy Department Office: Engineering 100G

#### Faculty

Andy Bazar, Jesa Kreiner, Sundaram Krishnamurthy, Timothy Lancey, Hossein Moini, Peter Othmer, James Rizza, Hasan Sehitoglu

### Adviser: Adviser:

Undergraduate/Graduate Program Adviser: Sundaram Krishnamurthy

#### INTRODUCTION

Mechanical engineers are employed in a wide range of professional activities. As research engineers they encounter a wide variety of scientific and technical problems; therefore graduate study is recommended for this type of engineer. At the other end of the spectrum the mechanical engineer is concerned with hardware development, including the design of mechanical components and systems, fabrication, manufacturing, reliability and testing. The work performed by mechanical engineers varies from general engineering to highly specialized functions, e.g., design, product development, construction, maintenance, sales, research and management. Mechanical engineers possess a firm understanding of science, mathematics and engineering needed to carry out these complex tasks which are so important to a modern technological society.

The undergraduate curriculum in mechanical engineering offers a broad education with coursework in basic sciences, mathematics, fundamental principles and practice of engineering, coupled with studies in arts and humanities and behavioral and social sciences, because of their importance in an engineering career.

#### BACHELOR OF SCIENCE IN MECHANICAL **ENGINEERING**

See "Departments of Engineering" for requirements in mathematics and science foundation courses (33 units), engineering core courses (24 units) and general education coursework.

#### Upper-Division Writing Requirement

In addition to the Examination in Writing Proficiency (EWP) the following courses are required by all mechanical engineering majors: EG-ME 306A, 306B, 376A and 376B. Written work for these courses must meet professional standards and requires completion of these courses with a grade of "C" or better.

#### Required Courses in Mechanical Engineering (39 units)

EG-EE 300 Electronic Instrumentation (3)

EG-EE 300L Electronics Instrumentation Lab (1)

EG-ME 306B Fluids and Thermal Laboratory (1)

EG-ME 322L Introduction to Computer Aided Design (3)

EG-ME 331 Mechanical Behavior of Materials (3)

EG-ME 333 Fluid Mechanics & Aerodynamics (3)

EG-ME 335 Introduction to Mechanical Design (3)

EG-ME 370 Seminar in Engineering (1)

EG-ME 376A Dynamic Systems and Controls Lab (2)

EG-ME 376B Energy and Power Lab (2)

EG-ME 407 Heat Transfer (3)

EG-ME 414 Design Project I (3)

EG-ME 419 Design Project II (2)

EG-ME 421 Mechanical Design (3)

EG-ME 426 Design of Thermal and Fluid Systems (3)

EG-ME 431 Mechanical Vibrations (3)

#### Technical Electives in Mechanical Engineering (11 units)

Before enrolling in any elective course approval of the adviser must be obtained.

# Power and Energy:

EG-GN 403 Computer Methods in Engineering (3)

EG-ME 405 Intermediate Fluid Mechanics (3)

EG-ME 417 Intermediate Heat Transfer (3)

EG-ME 434 Energy Conversion and Power (3)

EG-ME 447 Piping Selection and Piping Network Design (3)

EG-ME 449 Internal Combustion Engines (3)

EG-ME 450 Power Plant Engineering (3)

EG-ME 451 Thermal Environmental Conditioning and Control (3) and trust region of this durable of religious search

EG-ME 452 Fluid Machinery (3)

EG-ME 454 Optimization of Engineering Design (3)

EG-ME 472 Solar Energy and Engineering Applications (3)

EG-ME 473 Introduction to Nuclear Engineering (3)

# Design and Materials:

EG-ME 320 Metallurgy (3)

EG-GN 403 Computer Methods in Engineering (3)

EG-ME 410 Introduction to the Finite Element Method and Applications (3)

Mechanical Control Systems (3) EG-ME 411

EG-ME 438 Analytical Methods in Engineering (3)

EG-ME 454 Optimization of Engineering Design (3)

Plastics and Other Non-Metallics (3) EG-ME 459

EG-ME 460 Failure of Engineering Materials (3)

Fabrication Methods (3)

EG-ME 461

Composite Materials (3) EG-ME 462

EG-ME 463 Introduction to Robotics and Automated

Manufacturing (3)

EG-ME 475 Acoustics and Noise Control (3)

EG-ME 480 Human Factors in Engineering (3)

Thermal and Fluids Engineering:

EG-ME 405 Intermediate Fluid Mechanics (3)

EG-ME 410 Introduction to the Finite Element Method and Applications (3)

EG-ME 415 Gas Dynamics (3)

Intermediate Heat Transfer (3) EG-ME 417

EG-ME 447 Piping Selection and Piping Network Design (3)

EG-ME 451 Thermal Environmental Conditioning and Control (3)

EG-ME 452 Fluid Machinery (3)

EG-ME 454 Optimization of Engineering Design (3)

#### Robotics and Controls Engineering:

EG-GN 403 Computer Methods in Engineering (3)

EG-ME 410 Introduction to the Finite Element Method and Applications (3)

EG-ME 411 Mechanical Control Systems (3)

EG-ME 454 Optimization of Engineering Design (3)

EG-ME 461 Fabrication Methods (3)

EG-ME 463 Introduction to Robotics and Automated Manufacturing (3)

#### MASTER OF SCIENCE IN MECHANICAL **ENGINEERING**

To qualify for admission to conditionally classified standing, applicants must meet the following University and departmental requirements:

- 1. Bachelor's degree from a regionally accredited institution
- 2. Bachelor's degree in mechanical engineering from an institution accredited by the Accreditation Board of Engineering and Technology (ABET)
- 3. Minimum grade-point-average of 2.5 in the last 60 semester
- 4. Good standing at the last institution attended

Students not meeting the above requirements may be admitted at the discretion of of the department chair and will be required to take an additional six or more units of adviser-approved prerequisite coursework. The student must demonstrate potential for graduate study by earning a grade-point average of 3.0 or higher in these courses.

Any student entering the Master of Science degree program without a B.S. in Mechanical Engineering also will be required to complete deficiency courses prior to beginning coursework for the master's degree.

#### Classified Standing

Students meeting the following additional requirements will be advanced to classified standing and are eligible to take graduate courses for which they are qualified.

- 1. Completion of all deficiency work specified by the graduate adviser with a grade of "B" or better.
- 2. Development of an approved study plan. Before completing nine units at CSUF toward the M.S. degree, the student must meet with an adviser for preparation of a study plan which must be approved by the department chair and Dean of Graduate Studies.
- 3. Fulfillment of the University Writing Requirement prior to completing nine units at CSUF toward the M.S. degree. Students must demonstrate writing ability commensurate with the baccalaureate degree. Please refer to the "Graduate Regulations" section of this catalog for further information on how this requirements can be met.

## Study Plan

The study plan consists of a minimum of 30 units of adviserapproved upper-division or graduate level course work which must be completed with an overall grade-point average of at least 3.0. At least half the units required for the degree must be in approved graduate (500-level) courses.

## Required Courses (6 units)

EG-GN 403 Computer Methods in Numerical Analysis (3) Additional adviser-approved math-oriented course (3)

#### Concentration Courses (15 units)

A student is required to select a minimum of 15 units in Mechanical Engineering. These units may be 400-level and 500-level courses and are selected according to the student's areas of interest. Course work is designed to meet student's professional career goals and may focus on the following areas: Power and Energy, Design and Materials, Thermal and Fluids Engineering, and Robotics and Controls.

## Other Courses (9 units) and application and collegery volton total

Elective units should be taken in Mechanical Engineering or a related engineering field and are subject to adviser approval.

## Exam/Thesis/Project Option

Subject to approval by the adviser, students may select one of the following options for final review by a department committee:

Oral comprehensive examination or EG-ME 598 Thesis (6 units) or EG-ME 597 Project (3 units)

## Mechanical Engineering Courses

## 102 Graphical Communications (3)

Graphics as a fundamental means of communication in design. Development of spatial visualization. Freehand sketching, and use of instruments, orthographic projection, pictorials. Dimensioning, tolerances, descriptive geometry, computer graphics, design procedure, cost analysis and design project. (1 hour lecture, 6 hours laboratory) (CAN ENGR 2)

## 202 Material Science (3)

Prerequisites: Chem 120A and Physics 225A. Scientific and engineering principles important in selection of materials in design. Stress, strain, electrical and magnetic properties. Crystalline structure and imperfections, environmental effects and other topics from material science. Metallic, organic and ceramic substances. (CAN ENGR 4)

## 304 Thermodynamics (3) Assembly on Early of English and English of English of

Prerequisites: Chem 120A, Math 150B and Physics 225A; corequisite: EG-GN 205 or consent of instructor. Energy and its transformation; heat and work; conservation of mass and energy, system properties, irreversibility and availability. Ideal gases, heat engines and refrigeration (both ideal and actual), equipment selection and sizing.

## 306A Unified Laboratory (1)

Prerequisites: EG-ME 102, Physics 225A; corequisite: EG-GN 205. Observations and measurements in the laboratory as an introduction to the experimental method. Static and dynamic measurements are made on simple engineering systems (beams, columns, pendulums, gyroscopes) using mechanical and electrical transducers. Report writing. (3 hours laboratory)

#### 306B Fluids and Thermal Laboratory (1)

Prerequisites: EG-ME 306A and EG-ME 333. Continuation of EG-ME 306A. Flow measurement techniques using orifice plates, venturimeters. Pitot probes and nozzles. Temperature and pressure measurement. Experimental studies of fluid friction and heat exchanger performance. Use of microcomputers in data acquisition, reduction and analysis. Technical report writing. (3 hours laboratory) as account from projects, en (yrotoroad daw

## 320 Metallurgy (3)

Prerequisite: EG-ME 202 or EG-ME 331. Structure and properties of metals and alloys, influences of mechanical and thermal treatments, plastic deformation, work hardening and recrystallization, grain growth, alloy diagrams, solution hardening, diffusion hardening, precipitation hardening, the iron-carbon system, composite materials, brittle, creep and fatigue failures.

## 322L Introduction to Computer Aided Design (3)

Prerequisite: approved study plan. Design using commercial computer aided design systems — roles of 2-D drafting, 3-D wireframe, solids modeling, finite element modeling and optimization in the computer aided design process. Design project utilizing appropriate software. CAD system selection criteria. (6 hours laboratory, 1 hour discussion)

## 331 Mechanical Behavior of Materials (3)

Prerequisite: Chem 120A, Math 250A, EG-CE 201; Corequisite: EG-ME 306A. Plastic deformation and hardening mechanisms, creep phenomena. Fatigue. Behavior at cryogenic temperatures. Fabrication processes and their effects on properties. Testing of materials.

## 333 Fluid Mechanics and Aerodynamics (3)

Prerequisites: EG-GN 205 and EG-CE 201. Principles of fluid mechanics and their applications; fluid properties; fluid statics; one-dimensional incompressible flow; concepts of multi-dimensional flows including conservation principles; similitude and dimensional analysis; elements of compressible flow; design considerations in fluid mechanics.

## 335 Introduction to Mechanical Design (3)

Prerequisites: EG-GN 205, EG-CE 302 and EG-ME 102. Kinematics and dynamics of mechanisms; design and analysis of linkages, gears, cams, through the use of analytical, graphical and computer-aided techniques.

## 370 Seminar in Engineering (1)

Prerequisite: senior standing in engineering. The engineering profession, professional ethics, and related topics. May be repeated once for credit with the approval of the faculty chair.

## 376A Dynamic Systems and Controls Laboratory (2)

Prerequisites: EG-CE 302, EG-EE 300, EG-ME 306A and EG-GN 308. Dynamic systems, vibration, acoustics and other mechanical subjects; analog and computer simulation of dynamic systems; robotics, computer controlled machining and automatic data acquisition. (6 hours laboratory)

## 376B Energy and Power Laboratory (2)

Prerequisites: EG-ME 304 and EG-ME 306B. Mass transfer, heat transfer, and thermodynamic phenomena and their interaction with mechanical systems. Team projects, engineering reports. (6 hours laboratory)

## 405 Intermediate Fluid Mechanics (3)

Prerequisites: EG-GN 205, EG-GN 308, EG-ME 333. Intermediate fluid mechanics and computer graphics for flow field visualization. 2-D and axisymmetric flow fields. Potential and viscous flow fields. Incompressible and compressible flows. Basic fluid equipment and computational fluid mechanics.

#### 407 Heat Transfer (3)

Prerequisites: EG-ME 333 and Math 250B. Principles of heat transfer and their applications: introduction to conductive, convective and radiation heat transfer; one-dimensional heat conduction; concepts of multi-dimensional conduction; convective heat transfer in conduits and external surfaces; heat exchangers and thermal system design.

## 410 Introduction to the Finite Element Method and Applications (3)

Prerequisites: Approved study plan. Basic concepts of integral and matrix formulation of boundary value problems. One dimensional finite element formulation of heat transfer, truss beam and vibration problems. Applications of commercial finite element programs. Selection criteria for code, element and hardware. CAD system interfaces.

## 411 Mechanical Control Systems (3)

Prerequisites: EG-GN 205, EG-GN 308 and EG-CE 302. Mechanical control system design and analysis. Pneumatic, hydraulic, electromechanical actuators and devices. Stability criteria, root locus plots, transfer functions, introduction to feedback control and microprocessor applications.

## 414 Design Project I (3)

Corequisites: EG-ME 426 and EG-ME 421. Introduction to design methodology, CAD/CAE philosophy, optimization, product liability, ASME codes, safety, human factors, material selection, legal aspects of design and professional ethics. Lab covers design project to be completed in EG-ME 419, feasibility study, preliminary design analysis, assembly drawings, and interim project report. Oral presentation is required for all projects. (1 hour lecture and 6 hours laboratory)

## 415 Gas Dynamics (3)

Prerequisites: EG-ME 304 and EG-ME 333. Thermodynamics of compressible fluid flow, normal and oblique shocks, flow through converging-diverging passages, flow in ducts with heating or cooling, interaction of shocks and expansion waves. Linearized 2-D flows, supersonic wind tunnel testing.

## 417 Intermediate Heat Transfer (3)

Prerequisites: EG-GN 205, EG-GN 308, and EG-ME 407. Computer color graphics for temperature field visualization. 2-D/3-D temperature fields. Steady and unsteady conduction heat transfer. Incompressible free and forced convective boundary layer flows. Multiple surface radiation analysis. Boiling and condensation. Emphasis on design aspects of computational heat transfer.

## 419 Design Project II (2)

Prerequisites: EG-ME 322L and EG-ME 414. Completion of the design project initiated in EG-ME 414. Course coverage encompasses finalizing the working drawings, analysis, construction of prototype, model or components, testing of the proposed design, and preparation of a final design report. Oral presentation is required for all projects. (6 hours laboratory)

421 Mechanical Design (3) Prerequisites: EG-CE 301 or EG-ME 331 and EG-ME 335. Design and application of machine components such as brakes, clutches, gears, springs, fasteners, lubrication of machine elements, bearings, gaskets, seals, "O" rings, methods for study of impact, dynamic loading and fatigue; comprehensive treatment of failure, safety and reliability.

## 426 Design of Thermal and Fluid Systems (3)

Prerequisite: EG-ME 407. Integration of fundamental principles of thermodynamics, fluid mechanics, heat transfer and related subjects in the design of thermal and fluid systems. The design process is applied to pumps, fans, turbines, boilers, and heat exchangers using economics and optimization with case studies.

## 431 Mechanical Vibrations (3)

Prerequisites: EG-GN 205, EG-GN 308 and EG-CE 302. Modeling and analysis of single and multiple degrees of freedom systems. Response to forcing functions. Vibrations of machine elements. Design of vibration isolation systems. Balancing of rotating machinery.

## 434 Energy Conversion and Power (3)

Prerequisites: EG-EE 300 and EG-ME 304. The direct conversion of heat to electrical energy, thermoelectric, thermionic and magnetohydrodynamic devices, solar and fuel cells; application and design considerations.

## 438 Analytical Methods in Engineering (3)

Prerequisite: EG-GN 308. Ordinary and partial differential equations with constant and variable coefficients; orthogonal functions; conformal mapping; potential theory; engineering applications.

## 447 Piping Selection and Piping Network Design (3)

Prerequisites: EG-ME 333 and EG-CE 301 or EG-ME 331. Pressure losses in piping networks; selection of piping based upon fluid, temperature, pressure and economic considerations; piping connections, fittings and components; stress analysis; review of national piping codes. The amelding landar strike from a latie

## 449 Internal Combustion Engines (3)

Prerequisites: EG-ME 304 and EG-ME 407. Thermodynamics of cycles for internal combustion engines, including fuels and combustion; performance characteristics of various types of IC engines, engine design concepts and applications.

## 450 Power Plant Engineering (3)

Prerequisites: EG-ME 304 and EG-ME 407. Engineering principles and design methods applicable to modern electrical power generation facilities. Economics, heat transfer, steam generation, fuels and combustion, and equipment. Steam, gas, turbine, diesel, nuclear and hydroelectric plants are considered.

## 451 Thermal Environmental Conditioning and Control (3)

Prerequisites: EG-ME 304 and EG-ME 407. The fundamentals of controlling the thermal environment within enclosed spaces. Theory and analysis of fundamental thermodynamics relating to thermal environmental engineering. Laboratory demonstrations of actual systems.

## 452 Fluid Machinery (3)

Prerequisites: EG-ME 304 and EG-ME 333. Thermal and hydraulic design and analysis of pumps, fans, turbines and compressors. Component selection, system design and performance evaluations.

## 454 Optimization of Engineering Design (3)

Prerequisites: EG-GN 308, EG-ME 335, or equivalent. Application of analytical and computer optimization techniques to engineering design problems. Presentation of design as an optimization task. One dimensional minimization. Unconstrained and constrained nonlinear programming. Approximation concepts. Duality. Computer applications to design problems using a general purpose optimization program.

## 459 Plastics and Other Non-Metallics (3)

Prerequisite: EG-ME 202 or EG-ME 331. Simplified chemistry of plastics. Applications. Manufacturing processes. Methods for preventing deterioration of nonmetallic materials. Composites. Ceramics. Refractories. Wood. Destructive and nondestructive testing of nonmetallic materials.

## 460 Failure of Engineering Materials (3)

Prerequisite: EG-ME 202 or EG-ME 331. Imperfections in solids; fracture initiation and crack propagation; dislocations; yield point phenomenon; fatigue; creep; ultrasonic effects; radiation damage; stress corrosion; hydrogen embrittlement; composite materials.

#### 461 Fabrication Methods (3)

Prerequisite: EG-ME 202 or EG-ME 331. Manufacturing processes. Metal joining processes. Casting, forging, powder metallurgy, machining and machining tools, finishing, coating, plating, non-metallic materials inspection and gaging, tolerances.

## 462 Composite Materials (3) was an absorption box visites

Prerequisites: EG-ME 202 and EG-CE 301 or EG-ME 331. Application, mechanical properties and fabrication studies of fiber reinforced composite materials, stress analysis of laminated anisotropic composite structures. Studies of special problems unique sinks, vortices. Rankine bodies, free eres, chann satisoquo ot

## 463 Introduction to Robotics and Automated Manufacturing (3)

Prerequisites: EG-ME 335 and EG-ME 376A. Kinematic, dynamic, control and programming fundamentals associated with industrial robots and programmable manipulators. Trajectory planning, application of robotics in manufacturing, computeraided design/computer-aided manufacturing and integration of robots into flexible manufacturing systems.

## 472 Solar Energy and Engineering Applications (3)

Prerequisites: EG-ME 304 and EG-ME 407. Solar collectors, space heating and cooling, power production and energy storage; review of basic economic principles; quantification of technical and economic performance of engineering solar systems; system performance.

## 473 Introduction to Nuclear Engineering (3)

Prerequisite: approved study plan. A review of atomic physics and nuclear fission; elementary reactor theory and reactor design.

#### 475 Acoustics and Noise Control (3)

Prerequisite: Physics 225C. Basic phenomena on the propagation, absorption and generation of acoustic waves, specification and measurement of noise, effects of noise on speech and behavior, legal aspects of industrial and building noise, principles and application of noise control.

## 480 Human Factors in Engineering (3)

Prerequisite: approved study plan. Principles of design for making products and systems faster, easier, and more efficient to use. Design project using these principles. Principles consider human capabilities and limitation of senses and responses to sensory stimuli. Physiological, psychological and work factors are evaluated for design of equipment, work methods, environments and standards.

## 497 Senior Project (1-3)

Prerequisite: consent of instructor, adviser and chair. Directed independent design project. M-Od to XOX alM-Od to the project of t

## 499 Independent Study (1-3)

Prerequisite: approval of study plan by instructor, adviser and chair are required. Specialized topics in engineering selected in consultation with and completed under the supervision of the instructor. May be repeated for credit.

## 500 Nuclear Reactor Design (3)

Prerequisite: EG-ME 473. Nuclear systems design, analysis and operation, including: nuclear fuel cycle, nuclear reactor systems, safety and safeguards, the regulatory process fusion.

## 508 Advanced Inviscid Fluid Flow (3)

Prerequisites: EG-GN 205, EG-GN 308 and EG-ME 333. Study of two- and three-dimensional potential flow theory. Sources, sinks, vortices, Rankine bodies, free jets, channel flow, air foils. Introduction to computational fluid dynamics. Complex potential and various transformation techniques are used.

## 511 Advanced Mechanical Vibrations (3)

Prerequisite: EG-ME 431. Vibrations in rotating and reciprocating machines; noise and vibration in fluid machinery; continuous systems; random vibrations; transient and nonlinear vibration, computer applications.

## 512 Advanced Mechanical Design (3)

Prerequisite: EG-ME 421. Advanced modern mechanisms. Analysis and synthesis of mechanisms. Computer aided design of mechanical, thermal and fluid systems. Methodology of design. Optimization in design.

## 516 Advanced Radiation Heat Transfer (3)

Prerequisite: EG-ME 407. Radiation heat transfer including the study of the geometric factor, black and real systems, and energy transfer in absorbing, scattering and emitting media, and radiation combined with other modes of energy transfer.

## 520 Advanced Viscous Fluid Flow (3)

Prerequisite: EG-ME 333. The fundamental equations of viscous fluid flow. Viscous drag estimation. Drag reduction methods. Introduction to instability and transition.

## 524 Advanced Thermodynamics (3)

Prerequisite: EG-ME 304. Equilibrium and stability criteria, third law of thermodynamics, multiple component systems, ionization, equilibrium reaction, lower core "ideal" gases, thermodynamic cycles.

# 525 Thermolasticity (3) Saved Power Conversion and Power (5)

(Same as EG-CE 525)

## 526 Advanced Convective Heat Transfer (3)

Prerequisite: EG-ME 407. Convective heat transfer; heat transfer in external and internal flow fields for both laminar and turbulent fluid flow; applications.

## 530 Advanced Strength of Materials (3)

Prerequisite: EG-ME 421. Energy methods. Castigliano's Theorem: curved beams, beams on elastic supports, thickwall cylinders, shrink fits, localized stress, column instability, failure theories, bearings. Led thousand proof has noticeled shard that

## 536 Advanced Conduction Heat Transfer (3)

Prerequisite: EG-ME 407. Conduction heat transfer; Bessel and Legendre functions, Fourier series solutions, heat sources and sinks, multidimensional problems, transient systems and numerical methods (finite difference and finite element methods).

#### 538 Advanced Engineering Analysis (3)

Prerequisites: EG-GN 403 and EG-ME 438. Partial differential equations in engineering, numerical techniques, integral equations, engineering applications.

## 540 Computer Applications In Engineering Design (3)

Prerequisite: EG-GN 403. Digital and analog computers in engineering design. Design methodology, modeling and simulation. Geometric Modeling. Design optimization. Expert systems in engineering design. Generalized programs and simulation languages are emphasized.

## 541 Finite Element Method for Mechanical Engineers (3)

Prerequisites: EG-ME 410 and EG-GN 403. Matrix formulation of basic equations in steady state and transient heat conduction. Elements and interpolation functions. Non-linear problem formulation. Finite element computer programs in heat transfer, fluid dynamics and design.

## 554 Applied Optimal Mechanical Design (3)

Prerequisite: EG-ME 454 or equivalent. Formulation of design optimization problems in mechanical engineering. Review of mathematical programming methods. Practical aspects of optimization. Design of complex mechanical systems. Individual projects will be assigned to apply optimization techniques to an engineering system or components.

## 576 Advanced Dynamics & Control of Mechanical Systems (3)

Prerequisite: EG-ME 411. Advanced study of the dynamics and control of mechanical systems including: state space modeling, Lyapunov stability, modern design techniques and case studies.

## 597 Project (1-6)

Prerequisite: consent of adviser.

## 598 Thesis (1-6)

Prerequisite: consent of adviser.

## 599 Independent Graduate Research (1-3)

Prerequisite: classified graduate status. Open to graduate students only by consent of Mechanical Engineering Graduate Committee. May be repeated for credit only upon approval of this committee. 576 Advances I symmetric or Control of Acochanical leaves (3)
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506 Advanced Inviscid Field Flow (3)
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511 Advanced Mechanical Vibrations (3)
Prerequisite EG-ME 431. Vibrations in soluting and reciprocating machines; noise and vibration in fluid machines; communications; transient and nonlinear vibration, computer applications.

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534 Adeire of Conduction Heat Transport (2)
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5.19 Advanced intersecting Analysis (3)
Proceedings EG GN 403 and EG-ME 438. Partial differential aquacions to engineering, numerical tachniques, integral equations, engineering applications.

540 Computer Applications in Engineering Design (3)
Presentations EO GN 401: Digit I and analog computers in engineering design. Design methodology, modeling and simulation. Obstineric Modeling. Design optimization. Expert systems in engineering design. Conserving programs and simulation languages are surphosphia.

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# School of Human Development and Community Service



Dean: Mary Kay Tetreault Associate Dean: Michael Parker

## Programs Offered

Child Development

Bachelor of Science Minor

## Counseling

Master of Science

#### Education

Master of Science

Concentrations in:

Bilingual/Bicultural Education (Spanish-English)

Elementary Curriculum and Instruction

Reading

Educational Administration

Special Education

Teaching English to Speakers of Other Languages (For further information refer to the Department of Foreign Languages and Literatures section of this catalog.)

Teaching Credentials (See Teaching Credential Programs section of this catalog)

## Health Promotion

Minor

## **Human Services**

Bachelor of Science Minor

## Military Science

Minor

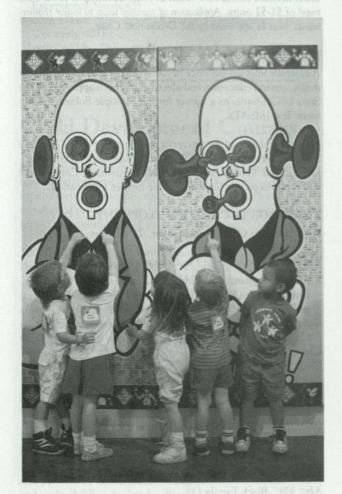
## Nursing

Bachelor of Science

#### Physical Education

Master of Science Bachelor of Science Minor The School of Human Development and Community Service provides students with an education that contributes to their intellectual, personal and professional development. The school offers programs that prepare students for professional fields of the greatest human concern in our richly diverse society: the education and development of our children, and the physical and mental health of all members of our community. Programs in the school lead to traditional academic degrees at the baccalaureate and graduate levels as well as to a variety of specific certificates, credentials and licenses.

The School of Human Development and Community Service is organized into the following instructional units: the Department of Child Development; the Department of Counseling; the Department of Educational Administration; the Department of Elementary and Bilingual Education; the Department of Health, Physical Education and Recreation; the Human Services Program; the Military Science Program; the Department of Nursing; the Reading Program; the Department of Secondary Education and the Department of Special Education.



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# Department of Child Development

Department Chair: Judith Ramirez Department Office: Education Classroom 105

Programs Offered Bachelor of Science in Child Development

Minor in Child Development

## Speech Comm 320 ... Integral long Communication Faculty

Sylvia Alva, Chris Boyatzis, Diana Guerin, Ellen Junn, Robert McLaren, Judith Ramirez, Mark Runco, Patricia Szeszulski

## Adviser hands and hands?

Full-time faculty, Academic and Career Advisement

INTRODUCTION De no no bosoph univolto ed lo enQ The Bachelor of Science in Child Development is an interdisciplinary degree program designed for students wishing to study the developmental and aging processes in humans throughout the life cycle, concentrating on the periods between birth and young adulthood. Since the program emphasizes interrelationships between the development of the person, the family, and the community, Child Development majors study and observe infants, children, adolescents, and adults in a variety of formal and informal settings. This and some solders are the managed sound blish

Child Development is an appropriate major for students planning to pursue advanced degrees in the behavioral sciences and/or enter professions dedicated to service to children and families; for example, education, child guidance, social welfare, or family counseling.

## BACHELOR OF SCIENCE IN CHILD DEVELOPMENT

The major in child development requires the successful completion of a minimum of 51-52 units which satisfy the pattern indicated below. Each course counted for the major must be completed with a grade of C or higher.

Many upper-division courses have prerequisites. It is the student's responsibility to become familiar with all appropriate campus regulations and degree requirements.

## Required Core Curriculum (33-34 units)

First Semester

Child Development 300 Writing for Child Development Professionals (3) or approved alternate

Approved foundations/research methods class (3-4)

One of the following social science cultural diversity classes: Afro-Ethnic Studies 309 The Black Family (3)

Afro/Human Services 311 Intracultural Socialization Patterns (3)

Amer Studies 301 The American Character (3)

Amer Studies 450 Women in American Society (3)

Chicano 305 The Chicano Family (3)

Chicano 431 The Chicano Child (3)

Sociology 431 Minority Group Relations (3)

Speech Comm 320 Intercultural Communication (3)

Advisement Track Course(s)

#### Second Semester

Child Development 320 Infancy and Early Childhood (3) Biology 305 Human Heredity and Development (3) One of the following (depending on advisement track): Sociology 451 Sociology of the Family (3) Sociology 453 The Child in American Society (3) Advisement Track Course(s)

## Third Semester

Child Development 325 Middle Childhood (3) Child Development 330 Adolescence and Early Adulthood (3)

One of the following (depending on advisement track): Child Development 394 Practicum Seminar (2) and 394L, Practicum in Child Development (1) or Ed Elm 315A Introduction to Elementary Classroom Teaching Lecture (2) and Ed Elm 315B Introduction to Classroom Teaching Fieldwork (1)

Advisement Track Course(s)

Fourth Semester

Child Development 490 Senior Seminar in Child Development (3) Advisement Track Course(s)

## Required Advisement Track (18 units)

In addition to the 33-34 unit core, the child development major requires each student to select, in consultation with an adviser, an 18-unit advisement track in the area of her/his anticipated professional specialization. Examples of advisement tracks include:

child care/pre-kindergarten education, early childhood special education, elementary education, and preparation of master's or doctoral degree work in fields other than elementary education.

NOTE: Transfer students may apply a maximum of 12 units of lower-division coursework taken at other institutions toward the total of 51-52 units. Application of transfer units to major requirements must be approved by the Department Chair.

## MULTIPLE SUBJECTS CREDENTIAL WAIVER

A carefully selected sequence of courses in the child development major, general education and electives has been approved by the State of California as a waiver for the Multiple Subject Assessment Test (MSAT).

Either completion of the waiver or passing scores on the Multiple Subject Assessment Test (MSAT) is a requirement for the Multiple Subjects (Elementary) Teaching Credential. Contact the Child Development Department for further information.

#### THE MINOR IN CHILD DEVELOPMENT

For a minor in Child Development, 21 units are required:

## Three of the following (9 units required)

Child Development 312 Human Growth and Development (3)

or Psychology 361 Developmental Psychology (3)

Child Development 320 Infancy and Early Childhood (3)

Child Development 325 Middle Childhood (3)

Child Development 330 Adolescence and Early Adulthood (3)

## One of the following (3 units required)

Child Development 394 Practicum Seminar (2) or Ed Elem 315 Introduction to Elementary Classroom Teaching (3)

## Three of the following (9 units required)

Afro 309 Black Family (3)

Art 380 Art and Child Development (3)

Biology 305 Human Heredity and Development (3)

Chicano 305 Chicano Family (3)

Chicano 431 Chicano Child (3)

Criminal Justice 425 Juvenile Justice

Administration (3)

Dance 471 Creative Dance for Children (3)

English 433 Children's Literature (3)

Music 333 Music and Child Development (3)

Music 433 Music in Early Childhood (3)

Physical Ed 364 Motor Development (3)

Physical Ed 372 Movement and the Child (3)

Psychology 464 Advanced Developmental

Psychology (3)

Psychology 470 Behavior Modification (3)

Sociology 413 Juvenile Delinquency (3)

Sociology 451 Sociology of the Family (3)

Sociology 453 Child in American Society (3)

Special Ed 371 Exceptional Individual (3)

Special Ed 421 Working with Parents of Children with

Exceptional Needs (3)

Speech Comm 307 Speech/Language Development (3)

(Formerly 403)

Theatre 402A Dramatic Activities for Children (3)

## Child Development Courses

## 210 Introduction to Child Development (3)

Introduction to the field of child development, including: historical and theoretical overviews; survey of programs and services for children, adolescents, and young adults; introduction to observational techniques; and exploration of professional opportunities, organizations, and publications.

## 300 Writing for Child Development Professionals (3)

Prerequisites: Psychology 101 or equivalent, Styles of written communication common to child development programs and services. Reporting on theories and research to multiple audiences (e.g. other professionals, parents, community groups, etc.). Meets upper division baccalaureate writing course requirement for child development majors.

## 312 Human Growth and Development (3)

Prerequisite: Psychology 101 or consent of instructor. Human growth and development, childhood, adolescence and middle and old age. Mental, social, emotional and physical development.

## 320 Infancy and Early Childhood (3)

Prerequisite: Psychology 101 or equivalent. Research, theories and their application to physical, cognitive, social, emotional, and personality development during prenatal, neonatal, infant, and early childhood periods, through six years.

## 325 Middle Childhood (3)

Prerequisite: Psychology 101 or equivalent. Physical growth, personality development and social participation during middle childhood. Patterns of cognitive growth and emotional adjustment.

## 330 Adolescence and Early Adulthood (3)

Prerequisite: Psychology 101 or equivalent. Examination of influences on human development before, during and following adolescence. Community resources and services for adolescents and their families. Consequences of adolescent experiences for later development.

## 363 Experimental Child Psychology (3)

(Same as Psychology 363)

## 394 Practicum Seminar (2)

Prerequisites: One of the following: Child Development 320, 325, or 330. Co-requisite: Child Development 394L. Classroom analysis of field experience focusing on linkages between theory and practice and skills and techniques of child development professionals. May be repeated for credit for a total of six units.

## 394L Practicum in Child Development (1)

Co-requisite: Child Development 394. Supervised field experience in agencies, institutions and organizations serving children and families. Minimum of four hours per week; total of 120 hours required for the major. May be repeated for a total of three units of credit. Credit/No Credit grade option only.

## 420 Moral Development for a Pluralistic Society (3)

Prerequisite: Child Development 312 or 325 or Psychology 361. Contrasting theories, research and practice related to moral development. Cultural and gender influences and issues.

## 490 Senior Seminar in Child Development (3)

Prerequisites: Two of the following: Child Development 320, 325 and 330. Topics in child development selected by the faculty and students participating in course. Theory, methodology and findings.

## 496 Student-to-Student Tutorials (1-3)

Prerequisites: a 3.0 or higher grade-point average and simultaneous enrollment in the course being tutored or previous enrollment in a similar course or its equivalent. Consult "University Curricula" section of this catalog for more complete course description.

## 499 Independent Study (1-3)

Individual research project, either library or field, under the direction of a Child Development faculty member. May be repeated for a maximum of six total units of credit. Only three units may be taken in a single semester.

# Department of Counseling

Department Chair: George T. Williams Department Office: Education Classroom 105

## Programs Offered

Master of Science in Counseling

Pupil Personnel Services (PPS) Credential Marriage, Family and Child Counselor (MFCC) Licensure Preparation

## Faculty

James R. Bitter, Gerald F. Corey, David Ho, Lisa Hoshmand, Dolores Jenerson-Madden, Mary E. Moline, Michael C. Parker, and George T. Williams

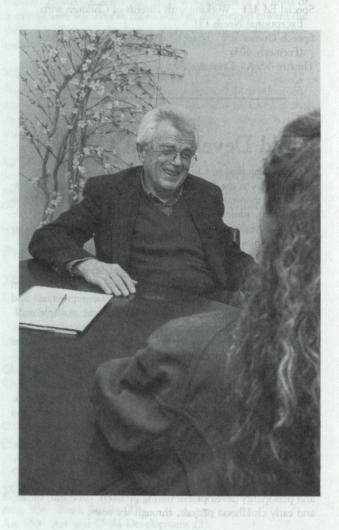
#### Advisers

Counseling, Master of Science: George T. Williams Pupil Personnel Services (PPS) Credential: George T. Williams Marriage, Family and Child Counselor (MFCC) Licensure: Mary E. Moline

## INTRODUCTION

The Department of Counseling offers a program leading to the Master of Science in Counseling, with a concentration in either the PPS Credential or the MFCC Licensure Preparation. This program is holistic in orientation and delivery. It regards the development of personhood and social consciousness, no less that of the intellect, as integral to professional growth. It places great emphasis on the cultivation of self-awareness and reflective thought, and in particular gender and cultural sensitivity and preparedness to work with diverse populations.

Increasing emphasis is placed on the following principles regarding therapeutic intervention: (a) Put prevention first; (b) the individual is best viewed, not in isolation from others or selfcontained, but as an idividual-in-community; and (c) a creative openness to diverse approaches to psychotherapy and counseling is to be maintained, but not at the expense of consistency or intellectual discipline. Our conception of human development concerns not only the individual self but also the self in relation to others, to society, and to humanity.



Students are prepared to work with individuals, couples, families, groups, and communities in a variety of settings. Our graduates have held positions in educational, business, health care, law enforcement, and correctional organizations.

The curriculum (or study plan) comprises 48 units, delivered in four phases. Phase I is introductory. Phases II and III form the body of core training in counseling. Phase IV comprises two areas of concentration, PPS or MFCC, from which the student may choose.

## Conditionally Classified Standing

Phase I 11 units: Counseling 505, 509 or 510, 511, 518, 519

## Classified Standing

Phase II 11 units: Counseling 500, 520, 521, 522, 523 Phase III 11 units Counseling 526, 527, 528, 529 or 530 Phase IV

PPS 15 units: Counseling 517, 533, 541, 547, 548, 549,

581, 597

MFCC 15 units: Counseling 517, 534, 548 (or one of 509,

510, 549), 561, 562, 584, 597

## MASTER OF SCIENCE IN COUNSELING

#### Admission

The Department welcomes applicants committed to counseling from diverse academic, social, and cultural backgrounds. International and minority students are especially encouraged to apply. Applicants who do not meet a specific requirement (e.g., GPA), but nevertheless show strength in others, will be individually considered. Admission is not based on any single factor considered alone, but on a composite assessment of the follow-

- 1. An acceptable bachelor's degree from a regionally accredited institution or its equivalent.
- 2. A minimum GPA of 3.0 for the last 60 sequential semester units completed.
- 3. A minimum GPA of 3.2 for five prerequisite courses in behavioral science or their equivalent: statistics, research methods, human development, abnormal psychology, and counseling theory. At least three of these five prerequisites must be completed at the time of entrance, and any remaining prerequisite(s) must be completed during the first semester of enroll-
- 4. At least two letters of recommendation.
- 5. A detailed personal statement (1,500-3,000 words) which informs the faculty about the applicant's personal and educational background, strengths and weaknesses, understanding of and motivation and suitability for entering into the coun-

seling profession, and long-term professional goals. This statement is very important because it enables the faculty to make informed decisions regarding admission.

Applicants should apply directly to the Office of Admissions and Records, California State University, Fullerton, CA 92634. Students must specify master's degree and credential objective (MFCC or PPS) on the application. However, letters of recommendation, the personal statement, and additional information should be sent to the Chair of the departmental Admissions Committee. The application deadlines are March 1st for Fall admission and October 1st for Spring admission.

All successful applicants are initially admitted as conditionally classified graduate students. They are invited to attend an orientation session before classes begin, and are encouraged to join the Graduate Counseling Students Association (GCSA).

Applicants denied admission but who have a minimum GPA of 2.5 may enroll as an unclassified postbaccalaureate student, and reapply for admission if and when their GPA is significantly improved.

The department recommends that students take at least six units per semester. Students working full-time are strongly advised against taking more than six units per semester, on acount of the demanding nature of the program. However, students should be aware that there may be times when they cannot enroll in specific courses because of the limit placed on class size or other factors.

#### Advisement

Each student is assigned to an adviser upon admission to the department. The adviser provides academic advisement, helps students to develop an official study plan, recommends them for classified standing and advancement to candidacy, and monitors their progress throughout the duration of enrollment.

Students should consult their adviser on a regular basis. It is especially important for them to initiate contact with their adviser as soon as possible during the first semester of enrollment to ascertain if any prerequisite courses have yet to be taken and be informed of other preclassification requirements to be met,

## Classification and Advancement to Candidacy

Each student undergoes two comprehensive evaluations, one during Phase I and the other during Phase III. Academic, personal, and professional development is assessed with respect to suitability for continued training in counseling. A positive outcome in Phase I Evaluation leads to promotion from Phase I to Phase II and a recommendation for classified standing by the department to the Office of Graduate Studies; a positive outcome in Phase III Evaluation leads to promotion from Phase III to Phase IV. A student who has been granted classified standing is normally advanced to candidacy after a request is filed for graduation by the student and an affirmative recommendation made by the department (see "Graduate Regulations" section of the university catalog.) 24 Michigan as too agone more admit to discass

Admission into the department, on a conditionally classified basis, does not guarantee advancement to classified standing or to candidacy. Students in classified graduate standing may be declassified, with a change to postbaccalaureate standing, unclassified.

Advancement to classified standing or to candidacy is not based solely on maintaining the GPA required for master's degree programs (3.0). It is also based on an assessment by the faculty of the student's aptitude and suitability in the counseling profession, progress in skill development, interpersonal and cultural sensitivity, as well as ethical and professional conduct.

## PUPIL PERSONNEL SERVICES (PPS) CREDENTIAL

A career in school counseling in California requires a credential issued by the State Commission on Teacher Credentialing (CTC). Presently, however, it is not necessary to hold a teaching credential in order to acquire a counseling credential. It is essential that candidates are well informed of credential requirements. For further information, contact the Office of Admissions to Teacher Education (Credentials Office) of the university (Education Classroom Building 207; tel. 714-773-3204).

The Department of Counseling is authorized by law (Ryan Act) to offer the counseling credential. The requirements are: successful completion of the 15-unit PPS concentration and passing a comprehensive examination during the last semester of enrollment. The department recommends that graduates file an application for the National Certified Counselor (NCC) credential under the National Board for Certified Counselors (NBCC) certification program.

Candidates already holding an appropriate master's degree in counseling may apply for admission with the PPS credential objective as classified postbaccalaureate students. All candidates are required to take the California Basic Educational Skills Test (CBEST). Prior to admission to fieldwork, all candidates shall have been determined to be free of a criminal record which would preclude the issuance of a credential.

## MARRIAGE, FAMILY, AND CHILD COUNSELOR (MFCC) LICENSURE

To practice as a Marriage, Family and Child Counselor in California, a license issued by the State Board of Behavioral Science Examiners (BBSE) is required. Our 48-unit study plan with the MFCC concentration is designed to prepare students for meeting licensure requirements (Business and Professions Code, Section 4980.37). It should be emphasized that licensure requirements extend beyond those of the M.S. degree: for instance, an internship, and passing official written and oral examinations. It is the student's responsibility to be informed of licensure requirements, which are subject to change from time to time. An authoritative source of information is Laws and Regulations Relating to the Practice of Marriage, Family and Child Counseling, Licensed Clinical Social Work, and Licensed Educational Psychology issued by the BBSE. For further information, contact directly the Board of

Behavioral Science Examiners, Department of Consumer Affairs, 400 R Street, Suite 3150, Sacramento, CA 94814-6240; Tel. (916) 445-4933 or (213) 620-2814.

All MFCC students must register with the BBSE as a trainee within 90 days of starting their coursework in the degree program. Application forms are available from the department office or from the BBSE. If the application is denied, the student will not be able to enroll in the practicum courses (COUNS 530 and 584) and consequently will not be able to complete the program.

Upon graduation, students have 90 days to register with the BBSE as an intern. It is advisable to write to the BBSE for a registration packet early (e.g., at the beginning of the last semester).

## **Counseling Courses**

252 Career Exploration and Life Planning (3)

Exploration of personal career potentials, employment trends, decision making, goal setting and job search methods.

380 Theories and Techniques of Counseling (3) (Same as Human Services 380)

416 Group Process and Membership (1-3) (Same as Human Services 416)

450 Theory and Practice of Group Counseling (3) (Same as Human Services 450)

468 Adlerian Counseling and Lifestyle Assessment (3)

Prerequisites: Counseling 380 or equivalent and consent of instructor. Experiential process course on Adlerian counseling and lifestyle assessment with a focus on family constellation, family dynamics, and family values; personal and social development; early recollections.

470 Foundations in Counseling Research (3)

Prerequisites: upper division and Math 110 or consent of the instructor. Examination of basic concepts in quantitative analysis used in counseling research. Course makes use of SPSS to accomplish statistical calculations. Emphasis given to understanding the logic of statistical analysis. Types of analysis illustrated by examples from counseling journals.

480 Case Analysis and Intervention Techniques (3) (Same as Human Services 480)

490 Standard Counseling Models (3)

Prerequisites: upper division standing and consent of instructor. Analysis of the standard counseling models including their procedures, outcomes, rationale and ostensible utility in treating abnormal or deviant behavior.

## 500 The Counseling Profession (2)

Prerequisite: graduate standing. The study of counseling as a mental health profession, including its history, current functions and future directions; and an examination of the counselor as professional, including educational goals, personal values, and cultural understandings.

## 505 Science of Human Inquiry I (2)

Prerequisites: graduate standing and completion of Psychology 201, Psychology 202, and Psychology 408; or equivalent undergraduate courses on history and systems in psychology, social science research methodology, and statistics. Foundations and characteristics of scientific models of human inquiry. Comparative review of experimental, naturalistic, and phenomenological modes of inquiry as applied to the counseling domain. Didactics and practicum in observation methods.

## 509 Practicum: Master Counseling With Children and Adolescents (1)

Prerequisites: Human Services 380 or Counseling 380, Counseling 490, or equivalent. On-going master counseling with children and adolescents is presented over a twenty-five (25) hour period, including time for interactive discussion based on student observations of the master counselor/instructor.

## 510 Practicum: Master Counseling With Adults (1)

Prerequisites: Human Services 380 or Counseling 380, Counseling 490, or equivalent. On-going master counseling with adults is presented over a twenty-five (25) hour period, including time for interactive discussion based on student observations of the master counselor/instructor.

## 511 Human Relations and Human Communication (2)

Prerequisites: Counseling 500, 505, 509/510, or concurrent enrollment in these courses. Designed to assist students in developing an understanding of and the skills related to the change process and the counseling relationship. A primary emphasis is placed on the counseling interview and the developing personhood of the client and the counselor.

## 517 Alcohol and Substance Abuse (1)

Prerequisites: Counseling 505, 509/510, or concurrent enrollment in these courses. A survey of issues, personality factors, physiological and psychological effects, and treatment processes associated with chemical dependency.

## 518 Theories of Human Development and Human Functioning (3)

Prerequisites: Counseling 500, 505 or concurrent enrollment in these courses. This course integrates normal and abnormal functioning with developmental processes. Functional and dysfunctional growth processes are presented in relation to issues confronting human beings across the lifespan.

## 519 Therapeutic Group Experience (1)

Prerequisites: Counseling 500, 505, 509/510, or concurrent enrollment in these courses. An experiential group which is provided for counseling students as a learning and self-development process. The focus of the group is on personal growth and increasing self-awareness as a counselor-in-training.

## 520 Therapeutic Modes in Individual Counseling (3)

Prerequisites: Counseling 505 and 511. Conceptual understanding of individual dysfunction; integrative case study; critical evaluation of theory. Formulation of therapeutic approach in individual counseling. Evolution of personal and formal models of practice.

## 521 Science of Human Inquiry II (3)

Prerequisites: Counseling 500, 505, 509/510, 511. Research design, methodology, and critique of research literature, quantitative methods; microcomputer applications. Applied research methods and program evaluation. Comparative review and synthesis on inquiry approaches.

## 522 Counseling Inquiry/Therapeutic Process (3)

Prerequisites: Counseling 505, 520, 521 or concurrent enrollment in these courses. Methods of counseling inquiry; interviewing, testing, and observation. Therapeutic process and case monitoring. Test usage, report writing, and community referrals in treatment planning.

## 523 Counseling and Culture: Theory, Practice and Research (2)

Prerequisites: Counseling 520. This course provides counseling students with the theory of and research in counseling people from diverse cultural backgrounds. It also addresses the counseling issues and practice associated with helping individuals from various cultures.

## 526 Professional, Ethical and Legal Issues in Counseling (2) Prerequisites: Counseling 523, 520, 522. An overview of the critical profesional issues in counseling with emphasis on current ethical and legal standards. Values integration and the relationship of values to the counselor's role in practice, training, supervision, and consultation. Appraisal and research methods are discussed.

## 527 Systems of Family Counseling (3) 9 92000 and Laorgania

Prerequisites: Counseling 523, 520, 522. Survey of family systems models, including Adler, Satir, Bowen, Haley, Minuchin, and others. I see adjust some smooth diswardless as your has

## 528 Groups: Process and Practice (3)

Prerequistes: Counseling 519, 520, 522. This course will focus on the basic issues and key concepts of groups process and the practical applications of these concepts in working with a variety of counseling groups.

## 529 Practicum: Supervised Counseling in the Schools (3)

Prerequisites: Counseling 523, Counseling 520, Counseling 521, and Counseling 522 and consent of instructor. Supervised clinical practice conducted by the counseling faculty in the service of children and adolescents. A minimum of 105 contact hours of counseling required for course completion.

## 530 Practicum: Supervised Counseling with Couples and Families (3)

Prerequisites: Counseling 523, Counseling 520, Counseling 521, and Counseling 522 and consent of instructor. Supervised clinical practice conducted by the counseling faculty in the service of adults. A minimum of 105 contact hours of counseling required for course completion.

## 533 Career Counseling and Career Development (2)

Prerequisites: Counseling 529 and 530. An overview of the major career theories with a focus on the existing issues and emerging trends in the field of career counseling and career development. Emphasis on how career counseling is practiced by the school and college counselor.

## 534 Human Sexual Dysfunction (1)

Prerequisites: Counseling 529 or 530. This course is an overview of the processes associated with the diagnosis and ethical and legal treatment of sexual dysfucntion.

## 541 Principles and Process of School Counseling (2)

Prerequisites: Counseling 520 or Counseling 529 and consent of instructor. Overview of school counseling and guidance movement with special emphasis on the role and function of the school counselor, guidance principles, techniques, and services in the school environment; analysis of the goals, organizational patterns, and structure of schools.

## 547 Consultation (2)

Prerequisites: Completion of Counseling 529 or Counseling 530 and consent of instructor. This course is designed to facilitate the development of knowledge and skill in consulting with individuals, groups, and systems. Focus is on theories, principles, practice and procedures in the consultation process and the management of human services and educational systems.

#### 548 Crisis Intervention (1)

Prerequisites: Counseling 380 or equivalent and consent of instructor. This course examines the theories and techniques associated with short-term crisis intervention and subsequent referral procedures. Topics include interventions in suicide, battering, and rape as well as with clients experiencing death and dying.

## 549 Seminar on Child Abuse (1)

Prerequisites: Counseling 500 or equivalent, or consent of the instructor. Presents characteristics of child abuse and a review of current laws, appropriate procedures for intervention, and methods of community networking and referral.

#### 561 Couples and Families in Process (3)

Prerequisites: Counseling 526, Counseling 527, Counseling 528, either Counseling 529 or 530, and instructor consent. Relationships and families examined in-depth; focus on communication, structural, emotional, and behavioral patterns exhibited. Examination of individual's family background; assessments of "normal" and dysfunctional family patterns emphasized.

## 562 Systems Interventions in Couples and Family Relationships (3)

Prerequisites: Completion of or concurrent enrollment in Counseling 561, and consent of the instuctor. Therapeutic interventions in couples and family systems with a special focus on communication, structural, emotional, and behavioral patterns exhibited.

## 581 Counseling Fieldwork in Schools (3)

Prerequisites: Approval by Academic Review Board and admission to PPS credential program. Supervised practice in helping troubled clients in a public school setting. A weekly casework consultation seminar. Required for counseling credential. May be repeated for credit.

## 582 Advanced Fieldwork in Schools (3)

Prerequisites: admission to concentration and approval by the Academic Review Board. Supervised practice in helping troubled clients in educational and related settings. Weekly casework consultation seminar. Required for counseling credential. May be repeated for credit.

## 584 Counseling Fieldwork with Couples and Families (1-6)

Prerequisites: admission to concentration and approval by Academic Review Board. Supervised practice in helping troubled clients in educational, enforcement, correctional and/or health care agencies. Weekly casework consultation seminar. May be repeated for credit.

## 595 Competency Certification Seminar (1-3)

Prerequisite: approval by Academic Review Board. Candidates present written, live, videotape or audiotape samples to the Board of Professional Supervisors, to acquire exit skill ratings on the competencies required. May be repeated for credit.

#### 597 Project (1-3)

Prerequisite: consent of instructor. Student invents and devises a tool, instrument or technique and reports. May be repeated for Preriquisites: Counselling 505, 509 510, on conductor stibers

## 598 Thesis (1-3)

Prerequisite: consent of instructor. Writing of a thesis. May be repeated for credit.

# 599 Independent Research (1-3)

Prerequisite: consent of instructor. Research and development in counseling pursued independently with periodic conference with instructor. May be repeated for credit.



Educational Administration

Courses

# Department of Educational Administration

Department Chair: Walter Beckman Department Office: Education Classroom 577

# Programs Offered

Master of Science in Education

Concentration in Educational Administration Internship in Educational Administration

Administrative Services Credential Programs

Preliminary and Professional

## Faculty

Louise Adler, Walter Beckman, William Callison, Tracy Gaffey, Kenneth Preble, Stanley Rothstein

## Mission a salashodas for substraint designing all miss allu

The mission of the Department is to provide leaders in the quest for excellence in education. Such leaders place the highest priority on teaching and learning, and regard their own development as a lifelong process.

## INTERNSHIP IN EDUCATIONAL ADMINISTRATION

The Department of Educational Administration has a program for Interns in Educational Administration which is approved by the California Commission for Teacher Credentialing. Because regulations governing this program change, students should contact the department office for current information and requirements.

## ADMINISTRATIVE SERVICES CREDENTIAL

The Administrative Services Credential programs of the Department of Educational Administration are approved by the Commission for Teacher Credentialing. Because regulations governing these programs change, students should contact the department office for current information and requirements.

## Preliminary Credential

The Preliminary Administrative Services Credential is the "Step 1" administrative credential in California, requiring a total of 28-33 units of work (which may be incorporated into the student's master's degree program). Upon receipt of the Preliminary credential, one is expected to obtain administrative employment in the California public schools within 5 years.

## **Professional Credential**

The Professional Administrative Services Credential is the "Step 2" administrative credential, requiring a total of 24 semester hours. One must complete work to earn it within 3 years of one's first administrative employment. However, it is legally permissible for the student to earn up to 50% of the units for it (i.e., 12 units) before beginning administrative employment. Please note that the Preliminary Credential is a prerequisite to entry to the program for the Professional Credential.

## For Further Information

Please contact the Department office (EC-577), phone 773-3911. Cal State Fullerton is one of the first institutions of higher education in California to have both credential programs already approved and in operation. At this early stage, it is vital that you have up-to-date individual advisement in planning your program.

## MASTER OF SCIENCE IN EDUCATION (EDUCATIONAL ADMINISTRATION)

The principal objective of the curriculum is to prepare carefully selected individuals for certain leadership positions in educational administration. The program is designed to help these individuals gain the technical knowledge and scholarship requisite to high achievement in these positions.

## Admission to Graduate Standing: Conditionally Classified

University requirements include: a baccalaureate degree from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see "Graduate Regulations" section of this catalog for complete statement and procedures). In addition, an applicant should have a successful teaching experience in an elementary or secondary school, or community college. (If such experience is not available, other experience in related fields is a recommended alternative if approved by a graduate adviser before starting the program). A satisfactory interview and references are also required.

## Graduate Standing: Classified

A student who meets the admission requirements and has a minimum 2.5 GPA in previous academic work may be granted classified graduate standing upon the development and approval of a study plan.

## Study Plan strate October Services Ordered Administrative Services Ordered and Plan Study Plan Stud

The study plan must include 30 units of committee-approved 500-level course work. Course requirements include field experience and a project.

No more than nine units of postgraduate work taken prior to classified standing may be applied to a student's master's degree program. Students concentrating in educational administration will take Educational Administration 503, Foundations for Administrative Leadership, as soon as they identify their interest in this degree. To continue in the program beyond this course, the student must be granted a "letter of admission to the program" and possess an official program evaluation. Students who desire only isolated courses from the program are normally denied admission to such courses. The adviser-approved 30 units (minimum) on the study plan will include:

Units
Core course work 9
Ed Admin 503 Foundations for Administrative Leadership (3) Ed Admin 505 Supervision of Curriculum (3) Ed Admin 510 Research Design and Analysis (3)
Concentration in Educational Administration
Each of the following (no grade below C):
Ed Admin 561 Governance, Systems, School and Community (3)  Ed Admin 563 School Personnel Administration (2)  Ed Admin 564 Seminar in School Law (2)  Ed Admin 565 Seminar in School Finance; Business Administration and Buildings (2)  Ed Admin 567A,B Fieldwork (2,2)  Ed Admin 588 Organization Theory and Management (3)  Ed Admin 597 Project (1-2)
One of the following
Ed Admin 566 Elementary Administration and Supervision (3) Ed Admin 586 Secondary Administration and Supervision (3)  Total

For advisement and further information, consult the graduate program adviser.

# Educational Administration Courses

## 501 Administrator Assessment (1)

Prerequisite: California Preliminary Administrative Services Credential. Assessment provides a general profile of the candidate for the California Professional Administrative Services Credential, in terms of strengths and areas for improvement. Evaluates skills and knowledge expected for the Preliminary Administrative Services Credential and introduces the Professional Credential program.

## 503 Foundations for Administrative Leadership (3)

Prerequisite: consent of instructor. Cultures and values to which schools must contribute. Community sociology, tax systems and public administration; the literature of leadership. Screening for admission to program. Required of all students during their first registration in school administration.

## 505 The Supervision of Curriculum (3)

Development of a quality program of instruction in elementary and secondary schools; appraisal of programs of instruction; advanced principles of curricular review and modification. Evaluation of subject matter competence in supervisory specialization.

## 510 Research Design and Analysis (3)

(Same as Ed Sec 510)

## 511 Instructional Leadership (3)

Prerequisites: California Preliminary Administrative Services Credential and Ed Adm 501 or departmental consent. Improving curriculum and instruction through management strategies, human relations skills, learning and instructional theory, educational trends and issues, and societal needs; includes planned field experience (1 unit). Meets California Professional Administrative Services Credential competency requirement (CTC)B2A(2).

## 512 Application of Organizational Theory (3)

Prerequisites: California Preliminary Administrative Services Credential and Ed Adm 501 or departmental consent. Major emphases include organizational theory, evaluation, and change implementation in educational organizations. Organizational relationships, both formal and informal, are included. Includes planned field experience (1 unit). Meets California Professional Administrative Services Credential competency requirement (CTC)B2A(1).

## 513 Evaluation Strategies (2)

Prerequisites: California Preliminary Administrative Services Credential and Ed Adm 501 or departmental consent. Development of skills to evaluate program and curriculum, including specially funded programs. Specific emphases include assessing teaching effectiveness and pupil achievement. Includes planned field experience (1 unit). Meets California Professional Administrative Services Credential competency requirement (CTC)B2A(3).

## 521 Fiscal Management (2)

Prerequisites: California Preliminary Administrative Services Credential and Ed Adm 501 or departmental consent. Management of fiscal problems, such as effects of contractual obligations and district-level funding and budgeting procedures. Includes planned field experience (1 unit). Meets California Professional Administrative Services Credential competency requirement (CTC)B2A(6).

## 522 Policy Development, School Law & Political Add Relationships (3)

Prerequisites: California Preliminary Administrative Services Credential and Ed Adm 501 or departmental consent. Relationships between policy development and school law in the context of political, legal and societal forces affecting school practice. Includes planned field experience (1 unit). Meets California Professional Administrative Services Credential competency requirement (CTC)B2A(5).

## 523 Management of Human and Material Resources (2)

Prerequisites: California Preliminary Administrative Services Credential and Ed Adm 501 or departmental consent. Staffing strategies and personnel relations management, as well as management of office, physical plant and support services. Planning for future needs. Includes planned field experience (1 unit). Meets California Professional Administrative Services Credential competency requirement.

## 531 Staff Development (2)

Prerequisites: California Preliminary Administrative Service Credential and Ed Adm 501 or departmental consent. Models and specific strategies for working with others in planning staff development to enhance learning and performance of adult learners (staff). Includes planned field experience (1 unit). Meets California Professional Administrative Service Credential competency requirement.

## 532 Cultural and Socioeconomic Diversity (2) 1617 8. A 702

Prerequisites: California Preliminary Administrative Services Credential and Ed Adm 501 or departmental consent. Educational implications of demographic trends; diversity of pupil needs, values and language; building parent and community understanding/advocacy for the educational program. Includes planned field experience (1 unit). Meets California Professional Administrative Services Credential competency requirement.

## 533 Supervision and Evaluation of Staff (3)

Prerequisites: California Preliminary Administrative Services Credential and Ed Adm 501 or departmental consent. Analysis of supervision and staff evaluation models. Focuses on establishing supervisor-teacher rapport, observing in the classroom, teacher conferencing and writing evaluation reports. Elective course in California Professional Administrative Services Credential program.

## 561 Governance, Systems, School and Community (3)

Structure, functions, trends, fiscal responsibilities and issues in the government of education at federal, state, county and local school district levels. School organization and administration. Community involvement; school-community participation and communication.

## 563 School Personnel Administration (2)

Prerequisite: Ed Adm 503. School personnel management, collective negotiations and role definition.

## 564 Seminar in School Law (2)

Prerequisite: consent of instructor. School law as a reflection of public policy. California Education Code and the California Administrative Code, Title 5, and county counsel opinions: administration, instruction and financial management of public schools; legal basis for public education in California.

## 565 Seminar in School Finance, Business Administration and Buildings (2)

Prerequisite: consent of instructor. School finance, business administration and buildings and the effective educational program. Financial principles. School revenues and expenditures, budgetary procedures and processes, cost analysis, business management and salary policies.

## 566 Elementary Administration and Supervision (3)

Prerequisites: Ed Adm 561. Leadership roles of elementary school principal and supervisor. Pupil personnel and instructional program in elementary school; working relations and morale among staff, community and pupils; parent education; relations with central district staff; management and recordkeeping functions; teacher evaluation.

## 567A,B Fieldwork (2,2)

Prerequisites: Ed Adm 566 or 586. Directed fieldwork in administrative areas in school systems.

## 586 Secondary Administration and Supervision (3)

Prerequisites: Ed Adm 561. Leadership roles of the secondary school principal and supervisor, pupil personnel and instructional program in secondary schools; development and administration of vocational education; morale among staff; community and pupils; relations with central district staff; management functions; teacher evaluation.

## 588 Organization Theory and Management (3)

Public school management; planning and practice in task analysis; planning and practice in setting of goals and objectives; implementation of plans related to goals; management tools; social, political and economic forces affecting education; decision making.

## 593 Administering the Least Restrictive Environment (3)

The role of the administrator in providing educational programs for exceptional pupils in environments that maximize contact with non-exceptional pupils. Emphasis will be placed on the implementation of the legislative mandates of Public Law 94-142, the Education for All Handicapped Children Act, and Assembly Bill 1250.

## 597 Project (1-2) State and how transport will be another

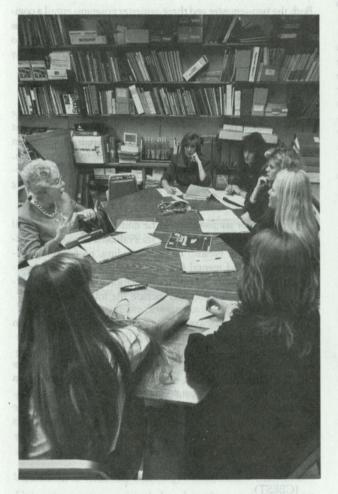
Prerequisites: Ed Adm 566 or 586 and Ed Sec 510, or consent of instructor. Individual research on a graduate project, with conferences with a faculty advisor, culminating in a project. Should be taken for 1 unit each time, total of 2 units required.

## 599 Independent Graduate Research (1-3)

Prerequisite: consent of instructor. Independent inquiry for qualified students.

221 Piscal Management (2) Prerequisités: California für limitéry and quintestive d'Euryl (28)

# Department of Elementary and Bilingual Education



Chair: Carol P. Barnes Department Office: Education Classroom 379

## Programs Offered stown ambland wal of benjimpe ton a

Master of Science in Education

Concentrations:

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Bilingual/Bicultural (Spanish-English), Elementary Curriculum and Instruction

## Basic Teacher Credential Programs

Multiple Subjects Credential Multiple Subjects-Bilingual Emphasis Credential

## Faculty

Carol Barnes, Ashley Bishop, Mildred Donoghue, S. Ana Garza, Andrea Guillaume, Patricia Keig, Norma Molina, Donald Pease, Thomas Savage, Hallie Yopp Slowik, Iuy Yee, Ruth Yopp-Edwards, Beverly Young, Carmen Zuniga-Hill

## Professional Development Sites

The Department of Elementary and Bilingual Education, in conjunction with the Placentia Unified, Fullerton, Santa Ana Unified School and Corona Unified school districts, has identified eight elementary schools as Professional Development Sites. Blocks of credential students work exclusively at these sites. Students in these blocks are expected to engage in extensive field-based activities which are correlated with university coursework and are given the opportunity to observe demonstration lessons and participate in late summer staff inservices as well as ongoing staff development activities.

Corona Unified: Highland (Ms. Sandra Hamilton, Principal) Vicentia (Mr. Jason Scott, Principal)

Placentia Unified: Normani bas mulusiano - 8084 mil bil Linda Vista (Mr. Earl Pratt, Principal) Tynes (Ms. Beth Berndt, Principal)

Fullerton: The Lord Hall Bridge Hall Bridg Golden Hill (Ms. Pat Puleo, Principal) Raymond (Ms. Carolee Michael, Principal)

Santa Ana Unified: Jefferson (Ms. Deborah McCormick, Principal) Monte Vista (Ms. Jacquin Terry, Principal)

## MULTIPLE SUBJECTS (ELEMENTARY) CREDENTIAL **PROGRAM**

Teacher education programs at CSUF are a two-semester professional preparation sequence and a three-semester internship sequence. Either program is taken during the fourth and/or fifth year of study at the University, and each leads to a Multiple Subjects Credential which enables individuals to teach in elementary school classes or in higher grades which have multiple subjects programs. The programs are designed to prepare teachers to teach in contemporary classrooms.

California law requires an academic major; a major in education is not permitted by law. Students devote their first three or four years of work to completing requirements for the baccalaureate degree with an academic major and, possibly, requirements for the waiver program (discussed later). Students should carefully select their academic major. Majors in the social sciences, humanities, or natural sciences provide excellent background for careers in elementary school teaching. Persons interested in working as bilingual teachers by earning a Multiple Subject Credential with a Bilingual Emphasis can consider majoring in a foreign language.

## Two-Semester Professional Preparation Program Sequence

The multiple subject professional preparation program is a twosemester sequence as follows:

## First Semester

Ed Elm 430A Foundations in Elementary School Teaching (3) Ed Elm 430B Curriculum and Instruction in Elementary School Teaching (Math, Science, Social Studies) (1)

Ed Elm 430C Supervised Fieldwork in Elementary Teacher Education (2)

Ed Elm 433 Language Arts and Reading Instruction in the Public Schools (3)

Ed Elm 439A Student Teaching in the Elementary School (4-

Ed Elm 439B Seminar in Elementary Student Teaching (1-3)

#### Second Semester

Ed Elm 429 Integrated Curriculum and Instruction in the Elementary School (1-3)

Ed Elm 430B Curriculum and Instruction in Elementary School Teaching (Math, Science, Social Studies) (2)

Ed Elm 439A Student Teaching in the Elementary School (2)

Ed Elm 439B Seminar in Elementary Student Teaching (2)

## Three-Semester Internship Program

The Three-Semester Intern Credential Program for Multiple Subjects and Multiple Subjects with a Bilingual Emphasis is a three-semester program to which candidates may apply while completing the first semester of the regular credential preparation program. Admission is contingent on approved employment with a participating district, superior standing in first semester coursework and student teaching, and recommendations from University and district personnel. The remaining two semesters involve paid teaching internship positions and University coursework. Information about this program is available in the Credential Preparation Center.

Both the two-semester and three-semester programs entail a commitment from 7:30 a.m. to 4 p.m. Monday through Friday, plus additional time for preparation. The three semester program also requires a class commitment from 4 p.m. to 7 p.m. Monday through Friday.

#### Admission Procedures and Criteria

Admission to the university does not include admission to the multiple subject professional preparation program. Students must apply for admission to the multiple subject credential program the semester prior to anticipated enrollment in the program. Filing deadlines are February 28 (to begin the program the following fall) and September 30 (to begin the program the following spring).

Applications for admission into the multiple subject credential professional preparation program are evaluated according to criteria (scholarship, breadth of understanding, professional aptitude, physical and mental fitness, fundamental skills, and personality and character). Evidence in relation to criteria is submitted at time of application and include the following:

- 1. Overall grade-point average in upper-half of those students in candidate's discipline;
- 2. Passage of the Multiple Subject Assessment for Teachers (MSAT) of the National Teacher Examination or completion of the Waiver Program, a program of studies at CSUF which, when completed, enables a student to apply for waiver of the examination. Information regarding the Waiver Program is available from the Credential Preparation Center in the Education Classroom Building, Room 207;
- 3. Passage of the California Basic Education Skills Test (CBEST);
- 4. Satisfactory completion of prerequisite courses:
  - a. Child Dev 325, Middle Childhood (3 units), and
  - b. Ed Elm 315A (2 units) and Ed Elm 315B (1 unit) Introduction to Elementary Classroom Teaching: Lecture and Fieldwork
- 5. Recommendations from academic faculty, school personnel, and/or other appropriate persons; and
- 6. Autobiography.

Further evidence is provided subsequent to application when opportunity is provided for the following: interview with program faculty, spelling test, speech and hearing test, tuberculosis screening, and certificate of clearance with respect to absence of criminal record.

Details concerning admission procedures and criteria are available in the Credential Preparation Center.

Admission to the first and subsequent semesters of the program is based on continuous and satisfactory progress in the prior semester.

## Bilingual-Bicultural Emphasis Program

A multiple subject professional preparation program with a bilingual-bicultural (Spanish-English) emphasis is available. Information about this program is available in the Credential Preparation Center.

## Application for Teaching Credentials

Upon completion of a credential program (multiple subject), the credential candidate must submit an application to the Commission on Teacher Credentialing through the Cal State Fullerton credential analyst. The credential analyst is located in the Credential Preparation Center. Additional information on the credential application process is available in the Credential Preparation Center.

## MASTER OF SCIENCE IN EDUCATION Bilingual/Bicultural Education (Spanish-English)

The program is designed to develop qualified bilingual/ bicultural instructors who can work as classroom or resource teachers and teacher trainers. It will help individuals teach others how to provide experiences in the cultural heritage of the target population and develop specific teaching techniques and methods in teaching reading and English as a second language (ESL). The program will also help individuals to interpret and implement research related to bilingual/bicultural children. Individuals will become skilled in their abilities to diagnose learning problems for such students and to develop and implement sound educational strategies.

## Admission to Graduate Standing: Conditionally Classified

University requirements include: a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see "Graduate Regulations" section for complete statement and procedures).

## Graduate Standing: Classified

A student who meets the admission requirements and the following requirements may be granted classified graduate standing: 1) the development of an approved study plan; 2) a basic teaching credential or equivalent experience; 3) an approved major (minimum of 24 units upper division or graduate); 4) a 2.5 grade-point average on previous academic and related work; 5) language competence (English and Spanish) as determined by satisfactory

interviews or course work; 6) completion of Spanish 466. Credit will be given for previous postbaccalaureate studies when possible. Otherwise well-qualified students may be admitted with limited subject or grade deficiencies, but these deficiencies must be removed. Grade-point average deficiencies may be removed by a demonstration of competency in the graduate program.

## Study Plan

The adviser-approved 30 units (minimum) on the study plan will include the following:

Units
Core course work 9
Ed Elm 500 Bilingual-Bicultural Curriculum (3) Ed Elm 511 Survey of Educational Research (3) Ed Elm 541 Psychological and Sociological Foundations of Bilingual-Bicultural Education (3)
Required teacher education course
Ed Elm 542 Current Issues and Problems in Bilingual-Bicultural Education
Course work outside bilingual-bicultural education 12
Chicano 431 The Chicano Child (3) Chicano 445 History of the Chicano (3)
One of the following:
For Lang Ed 443A Principles of Teaching English to Speakers of Other Languages (3) For Lang Ed 443B Principles of Teaching English to Speakers of other Languages (3)
One of the following:
For Lang Ed 527 Theorgy of Bilingual Language Acquisition (3) For Lang Ed 595 Curriculum and Program Design for TESOL (3)
Elective selected with approval of adviser 3
Culminating experience
One of the following:
Ed Elm 594 Research Seminar (3) or Ed Elm 597 Project (3) or Ed Elm 598 Thesis (3)
Total units
For further information consult the graduate program adviser.

## MASTER OF SCIENCE IN EDUCATION Elementary Curriculum and Instruction

The program is designed to help career classroom teachers upgrade their skills, become informed about new ideas in elementary teaching, and prepare for curriculum and instructional leadership in elementary classroom teaching, early childhood education, staff development, and computer education in public and private schools. Students may follow the study plan outlined below for the concentration in Elementary Curriculum and Instruction or they may elect to specialize in one of four emphasis areas: Staff Development/Mentor Teacher, Early Childhood Education, Computer Education, and Diversity.

## Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited instruction and a grade-point average of at least 2.5 in the last 60 semester units attempted (see "Graduate Regulations" for complete statement and procedures).

## Graduate Standing: Classified

A student who meets the admission requirements and the following requirements may be granted classified graduate standing upon the development of an approved study plan; a basic teaching credential or equivalent experience, and an approved major (minimum of 24 units upper division or graduate), a 2.5 gradepoint average on previous academic and related work. Credit will be given for previous postbaccalaureate studies when possible. Otherwise well-qualified students may be admitted with limited subject or grade deficiencies, but these deficiencies must be removed. Grade-point average deficiencies may be removed by a demonstration of competency in the graduate program.

#### Study Plan

The adviser-approved 30 units (minimum) on the study plan will include the following:

Units
Core course work 9
Ed Elm 511 Survey of Educational Research (3)
Ed Elm 529 Graduate Studies: Learning Theory for Classroom Use (3)
Ed Elm 536 Curriculum Theory and Development (3)
Course work in concentration
One of the following:

Ed Elm 521 The Study of Teaching (3) Ed Elm 527 Graduate Seminar in Developmental Psychology: The Human from Conception Through Eight Years (3)

Ed Elm 528 Reading/Language Arts in the Early Childhood Curriculum (3) Ed Elm 538 Graduate Studies: Early Childhood Education (3) Ed Elm 539 Clinical Supervision: Analyzing Effective Teaching (3)

Ed Elm 553 Models of Teaching (3)

## Three of the following:

Ed Elm 530 Graduate Studies in Elementary Education: Second Languages (3) Ed Elm 531 Graduate Studies in Elementary Education: Integrated Language Arts (3) Ed Elm 532 Graduate Studies in Elementary Education: Mathematics (3) Ed Elm 533 Graduate Studies in Elementary Education: Science (3) Ed Elm 534 Graduate Studies in Elementary Education: Social Studies (3) Ed Elm 535 Graduate Studies in Elementary Education: Reading in the Language Arts Program Ed Elm 537 Graduate Studies: Current Issue and Problems (3)

Electives selected with approval of the adviser ............. 6

Culminating experience ......

One of the following:

Ed Elm 594 Research Seminar (3) or Ed Elm 597 Graduate Project (3) or Ed Elm 598 Thesis (3)

For further information, consult graduate program adviser.

## MASTER OF SCIENCE IN EDUCATION Elementary Curriculum and Instruction Emphasis in Early Childhood Education

This emphasis is designed to meet the greater community and professional awareness of the importance of quality education during the critical early years of school. The educational demand for sound planning and instruction in preschool, kindergarten, and the primary grades has increased the need for effective specialists in Early Childhood Education.

## Admission to Graduate Standing: Conditionally Classified Classified

The requirements for admission to conditionally classified or classified standing are the same as for the M.S. in Education concentration in Elementary Curriculum and Instruction.

Study Plan: Early Childhood Education  The adviser-approved 30 units (minimum) on the study plan will	MASTER OF SCIENCE IN EDUCATION Elementary Curriculum and Instruction Emphasis in Staff Development
Units Core Course Work	This program is designed to enable educators to assume leader- ship roles in staff development in school districts. The sequence of courses is also designed to help mentor and master teachers and potential mentor teachers to understand contemporary trends and research findings in elementary curriculum and instruction.
Ed Elm 511 Survey of Educational Research (3) Ed Elm 529 Graduate Studies: Learning Theory for Classroom Use (3)	Admission to Graduate Standing: Conditionally Classified/ Classified
Ed Elm 536 Curriculum Theory and Development (3)  Coursework in Early Childhood Emphasis	The requirements for admission to conditionally classified or classified standing are the same as for the M.S. in Education concentration in Elementary Curriculum and Instruction.
Ed Elm 527 Graduate Seminar in Developmental	Study Plan
Psychology: The Human from Conception through Eight Years (3) Ed Elm 528 Reading/Language Arts in the Early Child-	The adviser-approved 30 units (minimum) on the study plan will include the following:
hood Curriculum (3)	Units
Ed Elm 538 Graduate Studies: Early Childhood Education (3)	Core Course Work
Curriculum-Focused Coursework	Ed Elm 511 Survey of Educational Research (3) Ed Elm 529 Grad Studies: Learning Theory for Classroom Use (3)
Two of the following:	Ed Elm 536 Curriculum Theory and Development (3)
Ed Elm 530 Grad Studies in Elem Ed:	Coursework in Staff Development/Mentor Teacher Emphasis 9
Second Languages (3) Ed Elm 531 Grad Studies in Elem Ed: Integrated Language Arts (3) Ed Elm 532 Grad Studies in Elem Ed: Mathematics (3) Ed Elm 533 Grad Studies in Elem Ed:	Ed Elm 521 The Study of Teaching (3) Ed Elm 539 Clinical Supervision: Analyzing Effective Teaching (3) Ed Elm 553 Models of Teaching (3)  Curriculum-Focused Coursework
Science (3) Ed Elm 534 Grad Studies in Elem Ed:	Two of the following:
Social Studies (3)	Ed Ell (317 Philade on Ellenth and School Eachers and
Ed Elm 535 Grad Studies in Elem Ed: Reading (3) Ed Elm 537 Grad Studies: Current Issues and Problems (3)	Ed Elm 530 Graduate Studies in Elementary Education: Second Languages (3) Ed Elm 531 Graduate Studies in Elementary Education: Integrated Language Arts (3) Ed Elm 532 Graduate Studies in Elementary
One elective approved by advisor	Education: Mathematics (3) Ed Elm 533 Graduate Studies in Elementary
Culminating Experience	Education: Science (3) Ed Elm 534 Graduate Studies in Elementary
One of the following:	Education: Social Studies (3) Ed Elm 535 Graduate Studies in Elementary
or Ed Elm 594 Research Seminar (3) or Ed Elm 597 Project (3) or Ed Elm 598 Thesis (3)	Education: Reading in the Language Arts Program (3) Ed Elm 537 Graduate Studies: Current Issues and Problems (3)
Total	One elective appproved by advisor
For further information, consult the graduate program adviser.	Culminating Experience

One of the following:	Ed Elm 532 Grad Studies in Elementary Education:
Ed Elm 594 Research Seminar (3)  or Ed Elm 597 Project (3)	Mathematics (3) Ed Elm 533 Grad Studies in Elementary Education: Science (3)
or Ed Elm 598 Thesis (3)	Ed Elm 534 Grad Studies in Elementary Education:
or Ed Elm 598 Thesis (3) Total	Social Studies (3)
	Ed Elm 535 Grad Studies in Elementary Education:
MASTER OF SCIENCE IN EDUCATION Elementary Curriculum and Instruction Emphasis in Computer Education	Reading in the Language Arts Program (3) Ed Elm 537 Graduate Studies: Current Issues and Problems (3)
This emphasis is designed to foster and articulate research on the	Culminating Experience
integration of computer-based technology into general elemen-	Cuminating Experience
tary curriculum. The sequence of courses will help teachers who provide on-site and district-level leadership for public schools	One of the following:
engaged in re-training teachers for computer eduation.	Ed Elm 594 Research Seminar (3)
The state of the s	or Ed Elm 597 Graduate Project (3)
The requirements for admission to conditionally classified and classified standing are the same as those for the M.S. in Educa-	or Ed Elm 598 Thesis (3)
tion concentration in Elementary Curriculum and Instruction.	Total30
Study Plan	nood Curaculun (3)
The study plan consists of 30 units of adviser-approved	MASTER OF SCIENCE IN EDUCATION
coursework:	Elementary Curriculum and Instruction Company Emphasis in Diversity
ballin 520 - cad Suday Asarding Theory has con	
Units	The Diversity emphasis is designed to help career classroom
Core Course Work	teachers become informed about appropriate curriculum and in- struction for the changing student population in the public
Ed Elm 511 Survey of Educational Research (3)	schools in the state of California. It will help individuals to
Ed Elm 529 Grad Studies: Learning Theory for Classroom	provide educational experiences and develop curriculum appro-
Use (3)	priate to culturally diverse populations.
Ed Elm 536 Curriculum Theory and Development (3)	Ed Elm 531 Grad Studies in Elém Ed:
Coursework in Computer Education Emphasis	Admission to Graduate Standing: Conditionally Classified/
Ed Elm 515 Problem Solving Strategies Including	Classified 13 and manufacture and ball
Logo (3)	The requirements for admission to conditionally classified and
Ed Elm 516 Integrating Elementary School Software	classified standing are the same as those for the M.S. in Educa- tion concentration in Elementary Curriculum and Instruction.
into the Curriculum (1)	and meta measure parts and are mid be
Ed Elm 517 Practicum: Elementary School Teachers and	Study Plan (8) southers lapood
Computers (3) at a day of stable (3) Or a mile ha	Units Visit Visit State and Learn Blad Units
Ed Elm 519 Advanced Technology in Education (3)	Core Course Work 9
Two from the following:	Ed Elm 500 Bilingual-Bicultural Curriculum (3)
Ed Elm 512 Improving Elementary Students' Writing	Ed Elm 511 Survey of Educational Research (3)
with Microcomputers (1)	Ed Elm 529 Grad Studies: Learning Theory for Classroom
Ed Elm 513 Teaching Utilities for Elementary School	Use (3)
Teachers (1) Latin Saludies Studies of the mild had	Diversity Emphasis Course Work
Ed Elm 514 Strategies for Using Data Base Management	Ed Elm 530 Graduate Studies in Elementary Education:
with Elementary Children (1) which all and the	Second Languages (3)
Education Redding to the Language Arts Program (3)	Ed Elm 541 Psychological and Sociological Foundations of
Curriculum-Focused Course Work 6	Bilingual Education (3)
Ed Elm 530 Grad Studies in Elementary Education: Second Languages (3)	Ed Elm 542 Current Issues and Problems in Bilingual Bicultural Education (3)

Curriculum-Focused Course Work ...

Integrated Language Arts (3)

	Ed Elm 531 Graduate Studies in Elementary Education:
	Language Arts (3)
	Ed Elm 532 Graduate Studies in Elementary Education: Mathematics (3)
	Ed Elm 533 Graduate Studies in Elementary Education: Science (3)
	Ed Elm 534 Graduate Studies in Elementary Education: Social Sciences (3)
	Ed Elm 535 Graduate Studies in Elementary Education: Reading in the Language Arts Program (3)
One	Advisor-Approved Elective 3
Cul	minating Experience3
	Ed Elm 594 Research Seminar (3)
	or Ed Elm 597 Project (3) or Ed Elm 598 Thesis (3)
	tracquisites bd blin 415 and reaching aredenial or conse

## COMPUTING CERTIFICATE FOR ELEMENTARY SCHOOL TEACHERS

The purpose of this certificate program is to provide participants with a broad understanding of the applications of microcomputers in the elementary school classroom and the instructionally related tasks in the public schools. The certificate program is designed to provide the needed competencies for participants to become curriculum specialists who will guide the integration of computers into the elementary school curriculum, their uses in instruction, and their applications in instructionally related activities at the elementary school.

Required courses (13 units)

Ed Elm 415 Microcomputers in the Elementary School (3 units)

Ed Elm 515 Problem Solving Strategies Including Logo (3 units)

Ed Elm 516 Integrating Elementary School Software into the Curriculum (1 unit)

Ed Elm 517 Practicum: Elementary School Teachers and Computers (3 units)

Ed Elm 519 Advanced Technology in Education (3 units)

Elective courses selected from the following list (2 units)

Ed Elm 512 Improving Elementary Students' Writing with Microcomputers (1 unit)

Ed Elm 513 Teaching Utilities for Elementary School Teachers (1 unit)

Ed Elm 514 Strategies for Using Data Base Management with Elementary Children (1 unit)

Total required units: 15 units (12 of which must be taken at California State University, Fullerton).

For further information, consult graduate program adviser.

## Elementary and Bilingual **Education Courses**

315A Introduction to Elementary Classroom Teaching: Lecture (2) (Formerly 315)

Prerequisite: Psych 101. An exploratory course required for students considering careers in elementary school teaching. Includes on campus seminars and overview of admission requirements for the Multiple Subject Credential Program. Must be taken concurrently with 315B. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

## 315B Introduction to Elementary Classroom Teaching: Fieldwork (1) (Formerly 315)

An exploratory field assignment consisting of 60 hours as a volunteer aide in a public, K-6, elementary classroom where all subject areas are taught. Requires a journal and evaluation by the classroom teacher. Must be taken concurrently with 315A. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

## 415 Microcomputers in the Elementary Classroom (3)

Prerequisite: teaching credential or candidacy for credential. Uses of microcomputers in elementary classroom. Development of computer related instructional materials for elementary schools. Evaluation of programs/equipment suitable for elementary children. Examination of issues involved in microcomputers in elementary schools. If taken for Credit, a "B" or higher is required. Instructional fee.

## 429 Integrated Curriculum and Instruction in the Elementary School (1-3)

Prerequisite: Admission to second semester of Teacher Education program. Additional study of elementary curriculum with emphasis on language arts, integrated instruction across the curriculum, and assessment of learning outcomes. May be repeated for a maximum credit of 3 units. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

## 430A Foundations in Elementary School Teaching (3)

Prerequisite: admission to teacher education. A focus on the curriculum of the elementary school, instructional planning, principles of effective teaching, generic instructional strategies, classroom management, and legal issues in education. To be taken concurrently with Ed Elm 430B, C and 433. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit. a level and legerallid to reservo level, here were

## 430B Curriculum and Instruction in Elementary School Teaching (Math, Science, Social Studies) (1-2)

Prerequisite: admission to teacher education. An emphasis on instructional materials, learning styles, inquiry, concept learning, problem solving, direct instruction applied to the teaching of math, science, and social studies. To be taken concurrently with Ed Elm 430A, C, and 433. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

## 430C Supervised Fieldwork in Elementary Teacher Education (2)

Prerequisite: admission to teacher education. Corequisites: Ed Elm 430A, B and 433. Students will serve as teacher participants in an assigned elementary school classroom. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit. perions select controllers of A 101 Avan selection

## 431 Curriculum and Instruction for Diverse Populations in Elementary Schools (1)

Prerequisite: candidate for or holder of basic teaching credential. Effective integration of curriculum and instruction relating to linguistic and cultural diversity in elementary school students.

## 433 Language Arts and Reading Instruction in the Public Schools (3)

Prerequisite: admission to teacher education. An overview of principles of reading instruction, elements of the language arts program including literature-based reading, content area reading, the role of phonics, emergent literacy, and diagnosis of reading problems. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

## 439A Student Teaching in the Elementary School (4-12)

Prerequisites: Ed Elm 430A, B, C, 433 and admission to student teaching. Corequisite: Ed Elm 439B. Participation in a regular elementary school teaching program for the full school day. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

## 439B Seminar in Elementary Student Teaching (1-3)

Prerequisites: Ed Elm 430A, B, C, 433 and admission to student teaching. Corequisite: Ed Elm 439A. Seminar in problems and procedures of elementary school teaching. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit. O old allow Constant Must be released under the Constant of the Consta

## 499 Independent Study (1-3)

Prerequisites: senior or graduate standing, consent of instructor prior to registration. Individual investigation under supervision of a faculty member. Only students of demonstrated capability and maturity will be approved. May be repeated for credit.

## 500 Bilingual-Bicultural Curriculum (3)

Identification and development of bilingual-bicultural curricula relative to Spanish-speaking students. Adaptation and modification of existing curricula. Development of units of instruction for use in bilingual-bicultural classrooms.

## 511 Survey of Educational Research (3)

Descriptive statistics and statistical inferences in educational research. Representative research papers. Principles of research design. Prepare papers using research findings.

## 512 Improving Elementary Students' Writing with Microcomputers (1)

Prerequisites: Ed Elm 415 and teaching credential or permission of instructor. Strategies for facilitating functional and creative writing of elementary children through use of microcomputer. Emphasis on keyboarding, word processing, and writing processes of children. Evaluation of current practices and research findings. Instructional

## 513 Teaching Utilities for Elementary School Teachers (1)

Prerequisites: Ed Elm 514 and teaching credential or permission of instructor. Strategies for improving teaching of elementary students through use of gradebook programs, word search generators, test generators, graphic programs, and instructional management software programs on microcomputers. Instructional fee.

## 514 Strategies for Using Data Base Management with Elementary Children (1)

Prerequisites: Ed Elm 415 and teaching credential or consent of instructor. Strategies for elementary school teachers to develop and use data base management with children. Fact finding, classification, inferences, and generalizations considered. Design continuum of data base competencies for children. Instructional fee.

## 515 Problem Solving Strategies Including Logo (3)

Prerequisites: Ed Elm 415 and teaching credential or permission of instructor. Strategies for using logo graphics, words and lists, and other microcomputer problem-solving applications with elementary school children. Design and use of microworlds to facilitate children's development of problem-solving skills. Instruc-

## 516 Integrating Elementary School Software into the Curriculum (1)

Prerequisites: Ed Elm 415 and teaching credential or consent of instructor. Effective integration of elementary school software into the curriculum of elementary schools. Emphasis on integration into current goals of elementary school instruction. Evaluation of current computer instruction. Instructional fee.

## 517 Practicum: Elementary School Teachers and Computers (3)

Prerequisite: Ed Elm 516. Strategies for effectively using computers with elementary school children to improve learning; course includes field work assignments in elementary schools, and oncampus seminars. Instructional fee.

## 519 Advanced Technology in Education (3)

Prerequisites: Ed Elm 415 and teaching credential or consent of instructor. Theoretical basis and strategies for improving teaching of elementary students through use of multimedia technologies. Emphasis on HyperCard, telecommunications, laser videodisc player, and scanners. Instructional fee.

## 521 The Study of Teaching (3)

Prerequisite: Ed Elm 511 and teaching credential or permission of instructor. A systematic study of the teaching process. Examination of the research methodology used to analyze teaching, the current knowledge of the association between teaching processes and student learning, and the implications of the research for the

## 527 Graduate Seminar in Developmental Psychology: The Human from Conception Through Eight Years (3)

Prerequisites: teaching credential or consent of instructor. The physical, social, cognitive-intellectual, and emotional development of individuals from conception to middle childhood. Current problems, theories and research.

## 528 Reading/Language Arts in the Early Childhood Curriculum (3)

Prerequisite: teaching credential or consent of instructor. Seminar: significant research, curriculum developments and materials, and current instructional strategies for promoting emergent literacy in children.

## 529 Graduate Studies: Learning Theory for Classroom Use (3)

Major theoretical positions in planning and interpreting classroom practices. Educational research findings, implications for curriculum development and teaching practices.

## 530 Graduate Studies in Elementary Education: Second Languages (3)

Prerequisites: teaching credential or consent of instructor. Seminar: significant research, curriculum developments and materials, and criteria for planning and improving second language programs including those for English as a second language.

## 531 Graduate Studies in Elementary Education: Integrated Language Arts (3)

Prerequisite: teaching credential or consent of instructor. Seminar: significant research, trends and problems in teaching the fundamental skills of communication; curriculum developments and materials, and criteria for planning and improving integrated language arts programs.

## 532 Graduate Studies in Elementary Education: Mathematics (3)

Prerequisites: teaching credential or consent of instructor. Seminar: significant research, curricular developments and materials, criteria for planning and improving mathematics programs and instruction.

## 533 Graduate Studies in Elementary Education: Science (3)

Prerequisite: teaching credential or consent of instructor. Seminar: research in elementary school science. The development of materials.

## 534 Graduate Studies in Elementary Education: Social Studies (3)

Prerequisite: teaching credential or consent of instructor. Seminar: research developments and materials, criteria for planning and improving social studies programs, and current techniques of teaching.

## 535 Graduate Studies in Elementary Education: Reading in the Language Arts Program(3)

Prerequisite: teaching credential or consent of instructor. Seminar: research developments and materials, criteria for planning and improving reading instruction in the integrated language arts programs, current instructional strategies, and the role of children's literature.

## 536 Curriculum Theory and Development (3)

Prerequisite: teaching credential or consent of instructor. Seminar: the school curriculum including the forces operating on the curriculum and the participants involved in curriculum building. The process of curriculum building.

## 537 Graduate Studies: Current Issues and Problems (3)

Prerequisite: teaching credential or consent of instructor. Problems and issues in elementary education, their causes and possible solutions.

## 538 Graduate Studies: Early Childhood Education (3)

Prerequisite: teaching credential or consent of instructor. Seminar: Application of significant research in the education of young children. Current instructional strategies and criteria for planning and improving programs in early childhood education.

## 539 Clinical Supervision: Analyzing Effective Teaching (3)

Prerequisite: teaching credential or consent of instructor. A systematic, research-based approach. Identifies basic components needed by teachers, staff developers, and administrators to improve their instructional skills. Includes principles of learning applied to supervision and applied practice in analyzing the instructional process.

## 541 Psychological and Sociological Foundations of Bilingual-Bicultural Education (3)

Application of psychological and sociological theory and techniques to the design of programs of instruction for limited and non-English-speaking children. The use of these disciplines for the development of emotionally and socially supportive learning environments.

## 542 Current Issues and Problems in Bilingual-Bicultural Education (3)

Problems and issues in the development and implementation of bilingual-bicultural education.

## 553 Models of Teaching (3)

Prerequisite: teaching credential or consent of instructor. Explores varied strategies of instruction, culminating in the identification and study of sixteen unique "models". Examines relationships among theories of learning and instruction. Investigates various instructional alternatives.

## 594 Research Seminar (3)

Prerequisite: consent of instructor. The preparation, evaluation, development, and presentation of curriculum research proposals culminating in a graduate project. Individuals and groups will participate in critiquing proposals, curriculum projects, and research results.

536 Cuerlculum Theory and Development (3) (3) sloods5

#### 597 Project (1-3)

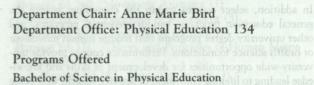
Prerequisite: consent of instructor. Individual research on an empiricial project, with conferences with the instructor, culminating in a project.

## 598 Thesis (1-3) - not to all the sent median bris.

Prerequisite: consent of instructor. Individual research with conferences with the instructor, culminating in a thesis.

599 Independent Graduate Research (1-3) Prerequisites: a teaching credential and one year of teaching experience. Independent inquiry.

# Department of Health, Physical Education and Recreation



Minor in Health Promotion Minor in Physical Education

Master of Science in Physical Education

Athletic Training Certification Program CRAMA TMAGUTE

Single Subject Waiver Program in Physical Education for the Ryan Single Subject Credential anousoubs as bas issessual

Adapted Physical Education Emphasis Credential

## The Department of Health, Physical Education and Australia

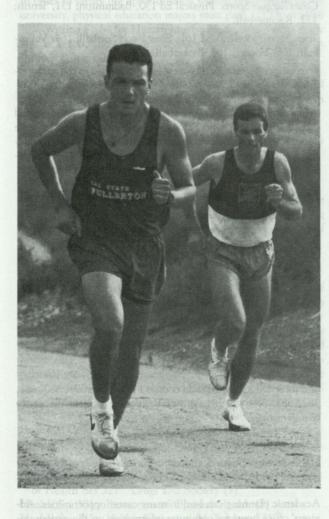
Gene Adams, C. Ian Bailey, Jan Barett, William Beam, Anne Marie Bird, Margaret Elliot, Steven Estes, Eric Hanauer, C. Jessie Jones, Kathleen Koser, Lynda Randall, Kenneth Ravizza, Roberta Rikli, Diane Ross, Virginia Scheel, Diana Shakarian, Carol Weinmann, Ronald Witchey

Advisement Advisement Colorabely a distributed mound Undergraduate and graduate students are required to seek academic advisement prior to their first registration at CSUF and continuously until completion of their degree programs. Students are assigned a full-time faculty member for academic advisement and graduation checks. Students may come to, or telephone, the department office for further information.

Transfer students should see an adviser immediately regarding transfer credit. For information on general education, consult the Academic Advisement Center.

## Lower-Division Requirements (Maximus NOITOUDORTNI

The Department of Health, Physical Education and Recreation, through its degree programs and through the creative and scholarly work of its faculty and students, is committed to the enhancement of broad understanding of knowledge about human motor performance and health science. Emphasis is placed on examination of the entire lifespan from infancy through the older adult years with special attention on understanding the dynamics of an ever-changing society and multicultural environment. The established degree programs include foundations courses subdisciplinary preparation, and individualized focus areas. Interwoven within this framework is the development of values and skills important to learning in higher education: critical thinking, leadership, verbal and written communication, and performance and wellness assessment.



The physical education bachelor of science degree, based upon a core curriculum, offers a general studies or a professional focus. The undergraduate minors in health science and physical education, also based upon core curricula, provide opportunities for professional and/or personal enhancement. The master of science degree in physical education has a required core curriculum, plus individualized courses leading to professional or disciplinary specific preparation.

In addition, select courses within the curriculum service the general education program, various credential programs, and other university degree programs that require human movement or health science foundations. Performance courses provide university-wide opportunities for development of skills and knowledge leading to lifelong enjoyment of activity, health, well-being and worthy use of leisure time. Internships, practica, independent study, and scholarly outreach provide opportunities for interaction and service within the community.

#### STUDENT AWARDS

Awards are presented each year to an upper-division, a postbaccalaureate, and an educational equity student.

## BACHELOR OF SCIENCE IN PHYSICAL EDUCATION

The Department of Health, Physical Education and Recreation offers the Bachelor of Science in Physical Education for students preparing to teach, to pursue graduate work in physical education and for careers in business, industry and community service.

The degree consists of 124 units with a maximum of 12 lower division units and a minimum of 33 upper division units in physical education. Each course counted toward the major must be completed with a grade of C or higher. All courses counted toward the major must be taken on an Option 1 (letter grade)

Transfer students must request two copies of transcripts of records of all previous scholastic work from each university or college attended. These transcripts must be sent by the issuing institution directly to the Office of Admissions.

All transfer students must have transcripts evaluated by a department undergraduate adviser prior to registration.

## Lower-Division Requirements (Maximum of 12 units)

Required Courses

Physical Ed 260 Movement Anatomy (3)

(General human anatomy courses may not be substituted for this requirement. However, such courses are highly recommended.)

A minimum of six courses, one from each of the following areas:

Fitness: Physical Ed 100, Physical Conditioning; 102, Jogging; 103, Fitness Walking; 144, Aerobic Exercise Weight Control; 146, Body Building.

Aquatics: Physical Ed 110, Swimming; 111, Life Saving; 112, Water Polo; 214A, Basic Scuba; 214B, Intermediate Scuba.

Combatives: Physical Ed 150, Wrestling; 151, Aikido; 152, Karate: 154, Self-Defense; 155, Fencing.

Individual Sports: Physical Ed 105, Cycling; 117, Bowling; 118, Archery; 119, Golf; 120, Gymnastics; 122, Sailing; 246A, Basic Hatha Yoga.

Court/Racquet Sports: Physical Ed 130, Badminton; 131, Tennis; 132, Racquetball.

Team Sports: Physical Ed 161, Slow Pitch Softball; 164, Volleyball; 165, Soccer; 167, Basketball.

(An intercollegiate sports course may be applied in the appropriate area.)

A maximum of 12 lower-division units may be counted toward completion of the major. However, students may elect to take upper-division work in lieu of further lower-division work excluding requirements stated above. All work taken at other institutions as lower-division work must be counted as such at CSUF.

## Upper-Division (Minimum of 33 units)

Required Courses (18 units)

Physical Ed 300 Principles of Movement

Physical Ed 348 Physiology of Exercise (348L optional)

Physical Ed 371 Theory and Principles of Human Motor Learning (371L optional)

or Physical Ed 383 Sport Psychology

Physical Ed 380 History of Physical Ed and Sport

or Physical Ed 382 Philosophical Perspectives of Human Movement

Physical Ed 381 Human Movement in Cultural Perspective or Physical Ed 384 Sport Sociology

and three units selected from courses Physical Ed 371, 380, 381, 382, 383, 384 which have not been used to meet the above requirements.

Electives (Minimum 15 units)

Upper-division physical education courses to complete the required 45 units for the major to be selected under advisement.

Academic planning can lead to many career opportunities. Advisers' office hours for obtaining information on the various opportunities are available in the department office. Students are encouraged to contact the adviser in the area of choice. Career opportunities are available in:

Adult Fitness/Health Promotion Athletic Training Coaching Elementary and Secondary Teaching Certification Health Sciences Human Performance Factors Humanities/Arts

Physical Education for the Handicapped Recreation Sport and Exercise Management Sports Careers Sports Medicine

## English Proficiency Requirement

In order to satisfy the upper-division writing requirement of the university, physical education majors must pass: (1) Physical Ed 301, Writing Styles for Human Movement Studies, with a grade of C or better; and (2) The Cal State Fullerton Examination in Writing Proficiency (EWP).

Note: Physical Ed 301 cannot be counted as a part of the physical education major, but may count toward general elective units in the 124 unit graduation requirement.

Please see additional information provided in this catalog on the writing requirement.

## Performance Proficiency Requirements

Performance courses should be taken to meet the prerequisite requirements for any analysis series course. Proficiency screening tests are administered in the analysis classes at the beginning of the semester.

## MINOR IN HEALTH PROMOTION

The department offers a minor in health promotion consisting of 21 units, with a minimum of 12 upper-division units selected in consultation with the minor adviser. The minor in health promotion is offered within a conceptual framework of holism, and may be of interest to students preparing for careers in teaching and health care or helping professions, as well as to students with a personal interest in health enhancement. Course work must be taken on an Option 1 (letter grade) basis and completed with a C grade or better to be counted toward the minor.

## Required Courses (12 units)

Chemistry 111 Nutrition and Drugs (3) or approved nutrition course (2-3) Health Sci 101 Personal Health (3) or Health Sci 321 Drugs and Society (3) Health Sci 301 Promotion of Optimal Health (3)

Health Sci 355 Health Education for Teachers (3)

## Electives (9 units) aspect and with a spect standard stan

Students may elect to take (up to a maximum of 3 units) performance courses which emphasize the application of basic health promotion principles in the student's own life: Physical Ed 100, 102-167, 246A, 246B; Dance 122, 126, 132, 142, 222, 232.

Students shall choose additional elective units, with approval of the minor adviser, from approved courses of specific relevance to health promotion (list available in department office, Physical Ed 134).

#### MINOR IN PHYSICAL EDUCATION

A physical education minor consists of 24 units of approved course work in physical education with a minimum of 18 upper division units. Course work must be completed with a grade of C or higher. All courses counted toward the minor must be taken on an Option 1 (letter grade) basis.

## Required Courses (18 units)

Physical Ed 260 Movement Anatomy (3) Physical Ed 300 Principles of Movement (3)

Physical Ed 348 Physiology of Exercise (3)

Physical Ed 371 Theory and Principles of Human Motor Learning (3)

or Physical Ed 383 Sport Psychology (3)

Physical Ed 380 History of Physical Education and Sport (3) or Physical Ed 382 Philosophical Perspectives of Human Movement (3)

Physical Ed 381 Human Movement in Cultural Perspective (3) or Physical Ed 384 Sport Sociology (3)

## Electives (6 units) PROFAM MOTTADUCE LADIEVERS

Three units lower-division Physical Education performance courses (100- and 200-level courses)

Three units upper-division Physical Education electives (300and 400-level courses)

## ATHLETIC TRAINING CERTIFICATION

Athletic Training Certification accredited by the National Athletic Trainers Association must be earned in conjunction with a major in physical education. Upon successful completion of the specific requirements listed below, the student must apply through the department to the National Athletic Trainers Association for the certification examination.

- 1. A bachelor's degree with a major in physical education with a GPA of at least 2.5 overall; 3.0 in the major; and 2.5 in biological science. when and acquire experiences prior as entry into the liter inc
- 2. CPR card (yearly) and current first aid card.
- 3. The following specific course work (or equivalent):

Biology 361 Human Anatomy (4)

Biology 362 Mammalian Physiology (4)

or Biology 310 Human Physiology (3)

Physics 211A Elementary Physics (3)

or Chemistry 100 Survey of Chemistry (3)

Chemistry 111 Nutrition and Drugs (3)

Health Sci 101 Personal Health (3)

Health Sci 102 Prevention and First Aid (2)

Physical Ed 200 Introduction to Athletic

Training (3) Training and Journal of the second

Physical Ed 260 Movement Anatomy (3)

Physical Ed 300 Principles of Movement (3)

Physical Ed 348 Physiology of Exercise (3)

Principles of Conditioning (3) Physical Ed 351

Prevention and Care of Athletic Physical Ed 365

Injuries (3)

Advanced Prevention and Care of Physical Ed 366 Athletic Injuries (3)

Physical Ed 367 Therapeutic Modalities and Exercise Rehabilitation (3)

Physical Ed 371 Theory and Principles of Human Motor Learning (3)

Physical Ed 383 Sport Psychology (3)

Physical Ed 451 Sports Medicine (3)

Physical Ed 496 Practicum (6) (1,200 clock hours)

#### Recommended courses:

Advanced First Aid Emergency Medical Training Health Sci 321 Drugs and Society (3)

## TEACHING CREDENTIAL — REQUIREMENTS FOR PHYSICAL EDUCATION MAJORS

The Physical Education Department offers a Waiver Program for obtaining a Ryan Single Subject Credential (K-12) in physical education.

The university program for meeting the basic requirements for the teaching credential with a specialization in physical education can be found elsewhere in this catalog (see Teaching Credential-Programs in the Academic Programs section). Additional information and requirements for the Department of Health, Physical Education and Recreation are as follows:

## Advisement

The department offers guidance for students considering a teaching career. This is available through the Physical Education Teacher Education Advisement Faculty. Prospective students should consult with the adviser as early as possible in order to plan and acquire experiences prior to entry into the Teacher Education Program. This will assist students to evaluate their qualifications and to plan appropriate course work.

A screening committee evaluates candidates' qualifications based on grade-point average, required course work and experiences with children and/or adolescents. Applications to the Teacher Education Program may be submitted when all required waiver courses are in progress, or completed. The bachelor of science degree is not a prerequisite for admission to the Teacher Education Program.

## Required Course Work: Teacher Education Waiver Program

In addition to, or as part of, the requirements for a major in physical education, all candidates for the credential must complete the following with a minimum of a C grade:

Physical Ed 300 Principles of Movement (3)

Contemporary Movement Environments Physical Ed 340 (equivalent to Ed Sec 310)

Physiology of Exercise (3) Physical Ed 348

Physical Ed 349 Measurement and Evaluation in Physical Education (3)

Physical Ed 364 Motor Development (3)

Physical Ed 371 Theory and Principles of Human Motor Learning (3)

Physical Ed 396 Physical Education Tutorial

Physical Ed 496 Physical Education Practicum

Analysis/Coaching Course Requirements:

Minimum of one team and one individual analysis class and one technique of coaching class.

Two courses selected from the following: Physical Ed 380, 382, 381, 384.

Two courses selected from the following: Physical Ed 363, 365, 372, 373, 383,

## Activity Requirement: Activity Requirement:

Nine units required, of which six units must be at the intermediate (B) or advanced (C) levels and at least one course in each of the following five categories: dance, basic movement, gymnastics, sports and games, and aquatics. See a listing of the approved waiver activity courses under the "Teaching Credential Programs" section of this catalog.

## Additional Requirement

Ed Sec 386 Adolescence (3)

## Completion of the Approved Waiver Program

All candidates for the credential must adequately demonstrate competency in subject matter, scope and content.

A copy of the waiver may be obtained from the physical education teacher education advisers. ABBC 128 AMASH

## Instructional Subject Matter of Physical Education

Students seeking a credential with a specialization in physical education must be able to demonstrate competency in instructional subject matter which is a part of the regular physical education program in the public schools. The Department of Health, Physical Education and Recreation specifically requires the following:

a. Ability to perform and analyze basic movement skills common to a large number of instructional physical activities.

- b. Adequate background and preparation to demonstrate breadth of understanding of the scope, sequence and content of physical education. 1 and 10 81 assol as phow sas
  - Nine units of required activities, of which six units must be from the intermediate (B) or advanced (C) levels and at least one course in each of the following five categories: (1) dance, (2) basic movement, (3) gymnastics, (4) sports and games, and (5) aquatics.

Note: Students are urged to consult with a physical educationteacher education adviser before submitting appropriate verification documents required for establishing subject matter competency and before applying to the Physical Education Teacher Education Program.

#### Experiences

Students are expected to have been involved in leadership experiences prior to formal application. All experiences can be in either coaching, recreation, camping, youth leagues, and/or aiding in public school physical education classes. These experiences can be either self-designed or designed through Physical Ed 496 (off-campus teaching practicum) and Physical Ed 396 (on-campus teacher aides).

#### Admission to Teacher Education

In addition to the requirements set forth in the Teaching Credential Programs and Department of Secondary Education sections of this catalog, the Department of Health, Physical Education and Recreation requires candidates to complete the Physical Education Waiver and to submit an application for the teaching program. In addition, the candidate must be available for a personal interview by the Physical Education Teacher Education Committee.

Prospective Teacher Education candidates are strongly encouraged to take additional units for a supplementary credential in a second subject area. More information is available from the Secondary Education Admissions Office (Education Classroom 207).

Acceptance into the program allows the candidate to enroll in a two-semester sequence: uberg bas political reagn bevorge A

First semester

Ed Sec 440F, 440R, 440S, Physical Ed 442, 449E.

Second semester a bas assumed to say the analysis of a ba

Physical Ed 449I, 449S.

Course to be completed by end of second semester

Ed Sec 440M.

#### ADAPTED PHYSICAL EDUCATION SPECIALIST CREDENTIAL

Cal State Fullerton offers an Adapted Physical Education Specialist Credential as a supplementary authorization to the Single Subject Physical Education Credential.

There are two options available. Option I is 18 units of required course work and experience within the field of physical education. This option is offered to applicants with a physical education teaching credential but no prior experience or course work in the adapted field. Option II is an individualized program designed by the physical education teacher education adviser and the candidate. This option is available for teachers holding a physical education credential and who have already been employed in the adapted field. The amount of prior adapted experience, the types of students worked with, evaluations by supervisors, prior course work, workshops and in-service training help to determine the individual program for each candidate.

Specific requirements for Adapted Physical Education Specialist credential include:

Physical Ed 260 Movement Anatomy (3)

Development Adaptations of Atypical (3) Physical Ed 363

Physical Ed 364 Motor Development (3)

Physical Ed 383 Sport Psychology (3)

Physical Ed 473 Motor Impairment (3)

Physical Ed 474 Kinesiotherapy (3)

One approved 3 unit upper-division Physical Education course.

The Adapted Physical Education Specialist Credential may be obtained only in conjunction with, or in addition to, a Single Subject Physical Education Credential.

#### MASTER OF SCIENCE IN PHYSICAL EDUCATION

The program provides advanced study within the broad discipline of physical education and allows students to elect course work, with adviser approval, in physiology of exercise, motor learning, adult fitness/aging, philosophy of human movement, sport psychology, sport sociology, sport/exercise management, and curriculum and instruction. The anather O and assented stamps band

The Master of Science degree in physical education is intended to meet the needs of students who wish to (1) prepare for admission to doctoral programs; (2) enhance competencies in teaching or athletic administration; and (3) to prepare for a variety of other physical education, fitness or sports-related careers.

#### Admission Requirements of another of the distribution of

An applicant must meet the university requirements for admission, which include a baccalaureate degree from an accredited institution, and a grade-point average of at least 2.5 in the last 60 semester units attempted (see "Graduate Regulations" for a complete statement and procedures). In addition to the university requirements for admission, acceptance into this program is contingent upon the following: (1) an undergraduate major in physical education with a grade-point average of 3.0 in upper-division physical education course work excluding health, recreation and fieldwork courses; and (2) submission of two letters of recommendation to the graduate studies coordinator.

Students with undergraduate degrees in areas other than physical education may be considered for conditional acceptance to the program. These students must complete 18 units of course work as follows with a minimum grade-point average of 3.0: Physical Ed 260, 300 and 348 plus nine units of electives from Physical Ed 349, 371, 380, 381, 382, 383, 490. Course work taken prior to completion of this requirement may not be counted toward the M.S. degree.

Students with grade-point deficiencies may be considered for conditional acceptance to the program. These students must complete additional undergraduate course work as specified by the graduate studies committee. Course work completed to raise the grade-point average may not be counted toward the M.S. degree.

Classified Standing Character and total A por be heartful Classified standing requires the development of a study plan (see below) approved by the program adviser, graduate studies committee and dean of graduate studies. No more than nine units of graduate work taken before classification may be included on the study plan. Any changes to the study plan after classified standing is granted must be approved in advance, in writing, by the program adviser and the graduate studies committee.

#### Advancement to Candidacy

Advancement to candidacy is attained by requesting a graduation check in the semester prior to graduation (see class schedule for deadlines) and receiving subsequent approval from the graduate studies adviser on the completion review form (Form B), mailed by the Graduate Studies Office. Students not completing requirements by the graduation date specified on the original graduation check must contact the Graduate Studies Office.

#### Graduate Advisement

Students should consult with the graduate studies adviser for general information regarding the program. Upon acceptance to the program, students are assigned a program adviser who assists in developing the study plan. Thesis/project advisers are selected in consultation with the student, program adviser and potential thesis/project chair. Students may not register for thesis/project without the consent of the thesis/project chair. Advisement during the summer is provided by the department chair. Students may not register for, or complete, thesis/project studies during the summer without written consent of the thesis/project committee.

#### Study Plan

A study plan includes a minimum of 30 units of approved graduate work; at least 18 of the total units must be 500-level physical education course work. All study plans must include the following physical education courses: 508; 510; 597 or 598; and three advanced study courses. Additional course work may be selected from: (1) 400- and 500-level courses in physical education; and/or (2) graduate or approved upper-division courses from other departments within the university. An open proposal presentation on the thesis/project, prior to undertaking the study, and a final oral examination on the study are required. Students subject to academic probation, or those on academic probation, may not register for Physical Ed 499, 550, 597, 598 or 599.

#### Required Courses

Statistical Methods in Physical Physical Ed 508 Education (3) Research in Physical Education (3) Physical Ed 510 Physical Ed 598 Thesis (3) or 597 Project (3)

Advanced Study Courses (6-9 units) Advanced Study Courses (6-9 units)

(See course descriptions for prerequisite requirements.)

Physical Ed 516 Advanced Study of the Philosophical Perspective of Human Movement (3)

Advanced Study in Physiology of Physical Ed 551 Exercise (3)

Advanced Study in Biomechanics (3) Physical Ed 552

Physical Ed 554 Advanced Study in Human Motor cation Waiver and to aibn Behavior (3)

Physical Ed 558 Advanced Study in Teaching Human

Movement (3)

Advanced Study in Sport Physical Ed 580

Psychology (3)

Physical Ed 582 Advanced Study in Sport Sociology (3)

Elective Courses

Approved 400/500-level physical education courses.

Approved upper division and graduate courses from other departments.

#### Graduate Level Writing Requirement

The graduate level writing requirement is met by taking Physical Ed 510, Research in Physical Education, and passing the course with a C grade or better.

## Health Science Courses

#### 101 Personal Health (3)

Basic concepts relating to health and well being from a holistic perspective. Mental, emotional, physical and socioenvironmental dimensions of health; sexuality and relationships; nutrition and physical fitness; use and abuse of drugs; health care services and current health problems. Instructional fee.

#### 102 Prevention and First Aid (2)

The hazards in environment. The care and prevention of accidents. Standard first aid certification by the American Red Cross granted upon successful completion of requirements. (Elective in Physical Education)

## 301 Promotion of Optimal Health (3)

(Same as Nursing 301)

## 320 Concepts in Health Science (3)

Prerequisite: one course from category IIIA 2 or 3 of general education and upper-division standing. Theoretical and practical issues of health science as a profession. Topics include: history, status, resources, roles in various settings, program implementation and evaluation, legal and ethical issues in health education.

#### 321 Drugs and Society (3)

Prerequisite: completion of lower-division general education science requirement. Habit-forming substances such as alcohol, tobacco, narcotics, hallucinogens, and related drugs, other stimulants and depressants. Social, historical, and legal aspects of the drug problem are considered.

#### 342 Stress Management (3)

Prerequisites: one course from Category IV. B of general education; junior or senior standing. The nature of stress and the physiological and psychological effects of prolonged stress responses. Includes short and long term somatic and behavioral techniques (exercise, relaxation, meditation, nutrition, time management and goal setting) for management of stress. (Same as Physical Ed 342) (Physical Education majors may not double count this course for General Education.)

#### 350 Nutrition: Vital Link to Better Health (3)

(Same as Nursing 350)

#### 355 Health Education for Teachers (3)

Prerequisite: junior or senior standing, School health, drug education, family living, community health, teaching philosophy, safety education and strategy. For California teaching credential.

#### 401 Epidemology (3)

Prerequisite: Health Science 320 and Psychology 201 or equivalent. Application of epidemologic procedures to the understanding of the occurrence and control of infectious and chronic diseases, mental illness, environmental health hazards, accidents and geriatric problems. (Same as Nursing 401)

#### 440 Determinants of Health Behavior (3)

Prerequisites: Health Science 320 and Health Science 301/Nursing 301. Survey of contemporary research on the health effect of human behavior. Introduction to theoretical foundations and practical applications of behavior in the context of health: physical, psychological, cultural and social health. Includes current issues and theories of health behavior.

#### 450 Applied Health Promotion (3)

Prerequisite: Health Science 320 and Psychology 470. Health promotion/risk reduction program content, development, implementation and evaluation. Topics include: weight control, stress management, substance abuse, physical fitness and accident prevention.

#### 475 Health Science Planning, Research and Evaluation (3)

Prerequisites: Health Science 320 and Psychology 201 or equivalent. Identification and application of concepts related to health science planning, research and evaluation. Includes analysis of planning and research designs applicable to health professionals as well as tools for measurement of health status at individual, community, national levels.

#### 495 Internship in Health Science (3)

Prerequisites: Health Science 320 and 450, senior standing, and consent of instructor. Supervised observation and field experience in worksite community health settings as conducted by government, voluntary, professional or industrial/corporate organizations. (May be repeated one time.)

## Physical Education Courses

Only one section of the following performance courses may be taken in the same semester (e.g., Physical Education 131A, B, C, D are the same activity): Physical Education 100, 102 through 167, 214A, 214B, 246A and 246B.

#### 100 Physical Conditioning (1)

Designed to improve the individual's overall fitness through an understanding and application of the basic principles and techniques of physical conditioning. Emphasizes muscular strength/ endurance, cardiorespiratory endurance and flexibility components through various forms of exercise methods. May be repeated for credit.

#### 101 Athletic Conditioning (specific sport) (1)

A conditioning program designed to improve strength, flexibility, agility and cardiovascular conditioning for a specific sport. Credit/no credit only. May be repeated for a maximum of four units of credit.

#### 102-167 Performance Courses (1)

102 Jogging; 103 Fitness Walking; 105 Cycling; 110 Swimming; 111 Life Saving; 117 Bowling; 118 Archery; 119 Golf; 120 Gymnastics; 122 Sailing; 124 Beginning Windsurfing; 130 Badminton; 131 Tennis; 132 Racquetball; 144 Aerobic Exercise and Weight Control; 146 Body Building; 150 Wrestling; 151 Aikido; 152 Karate; 154 Self-Defense; 155 Fencing; 161 Slow Pitch Softball; 164 Volleyball; 165 Soccer. Performance courses are primarily instructional. Beginning, intermediate and advanced sections are offered for most performance courses. Students who already possess some proficiency in an activity should consider the course chosen from the standpoint of the level of skill development which may be encountered, standards of proficiency expected and their own ability level. Initial assessment and determination will be made by the course instructor. May be repeated for credit.

#### 170-189 Intercollegiate Sports (2)

Prerequisite: consent of coach. An intercollegiate activity in individual or team sports in an educational setting under the direction of a coach. 170 Gymnastics; 172 Cross Country; 174 Track-Field; 175 Tennis; 176 Wrestling; 177 Fencing; 178 Basketball; 179 Baseball; 180 Soccer; 184 Football; 185 Volleyball; 186 Softball. May be repeated for credit.

#### 190 Team Management (2)

Prerequisites: consent of coach and department chair. Field experience in the management of an intercollegiate sport. May be repeated for maximum of eight units of credit. (Credit/No Credit only) pulsava sa equitre stillent quinunauo anche e son

#### 200 Introduction to Athletic Training (3)

Practical skills acquisition for the treatment, prevention and care of sports-related injuries. Basic required course for all students admitted to the National Athletic Trainer's Association (NATA) certification preparation. (2 hours lecture/2 hours activity)

#### 214A Basic Scuba (3)

Prerequisites: Ability to swim 400 yards, tread water one minute and swim 25 yards underwater. Skin and scuba diving, theory of diving, safety procedures and ocean environment. Open Water Basic Scuba Certification earned with successful completion. (1 hour lecture, 2 hours pool activity/ocean dives)

#### 214B Intermediate Scuba (2-3)

Prerequisite: Open Water Scuba Certification. Application of scuba diving, including photography, navigation, salvage, game hunting, night diving and others. Advanced Scuba Certification for successful completion. (1 hour lecture, 2 hours pool activity/ ocean dives)

#### 246A Basic Hatha Yoga (2)

Basic Yoga postures, breathing and relaxation techniques, and beginning meditation techniques from theoretical and experiential perspectives. Awareness, concentration and breathing patterns that accompany the movements of Hatha Yoga. (1 hour lecture, 2 hours activity) (Same as Religious Studies 246A)

#### 250 Mental Skills for Sport Performance (3)

Developing an understanding of the mental aspects of sport performance and learning mental skills that can be used to enhance sport performance. (Credit/No Credit only)

#### 260 Movement Anatomy (3)

The musculo-skeletal system and its function in human movement. Movement in sports skills and the muscles involved.

#### 300 Principles of Movement (3)

Prerequisite: Physical Ed 260. General movement patterns as applied to sport and human movement.

#### 301 Writing Styles in Human Movement Studies (3)

Prerequisite: English 101 or equivalent with C or better. Identifies the various perspectives through which human movement can be studied. Writing styles appropriate for each dimension are emphasized. Meets upper division baccalaureate writing course requirements for physical education majors; however, the course is not applicable toward the major.

#### 303-319 Analysis of Sports (2)

Prerequisites: prior experience in the specific sport(s) to be studied; must demonstrate proficiency. Analysis of specific sport(s), including game play and skill performance. Understanding the nature of the activity. 304 Swimming; 305 Golf; 306 Gymnastics; 308 Soccer; 309 Badminton/ Racquetball; 312 Tennis; 316 Volleyball; 319 Softball.

#### 325 Techniques of Coaching (2)

Prerequisite: upper division standing. To prepare students to coach selected sports. Coaching techniques; conditioning; budget preparation; gender, multicultural and equity issues; purchase and care of equipment; scheduling, design and care of facilities. Concurrent enrollment in Physical Education 496 (1-3 units) required.

#### 320-338 Techniques of Coaching: Selected Sports (2)

To prepare the student to coach specific individual and team sports. Coaching techniques, conditioning of athletes, budget preparation, purchase and care of equipment, scheduling and design and care of facilities. 328 Gymnastics; 332 Tennis; 334 Baseball; 337 Basketball. A maximum of 6 units may be applied toward completion of the units required for the major.

#### 340 Contemporary Movement Environments (3)

The acquisition of physical skills in diverse environments; similarities and differences among age groups. Useful for those considering teaching careers. Required visits to schools and other sites.

#### 341 Analysis of Basic Motor Skills (2)

Identification and analysis of motor skills and patterns basic to all physical activities. Critical evaluation of games and activities as to their effectiveness in promoting basic motor skills in children is emphasized. Recommended for those pursuing careers with children.

## 342 Stress Management (3)

(Same as Health Science 342)

#### 348 Physiology of Exercise (3)

Recommended: Biology 310 or Biology 362. Physiological processes in physical activities and the effect of training upon perforourses or two upper division ourses from the Ceronto.sonem

#### 348L Physiology of Exercise Laboratory (1)

Prerequisite: prior completion or concurrent enrollment in Physical Ed 352. Laboratory techniques in physiology of exercise. (3 hours laboratory)

349 Measurement and Evaluation in Physical Education (3) Tests and measurements used in the evaluation of human performance. Analysis and interpretation of data in different move-473 Motor Lapsiment (3) Prerequisites Physical Edd 3634 Societ cort ment environments.

#### 350 Physical Activity and Lifelong Well-Being (3)

Prerequisite: one course from Category III.C.I. of General Education and upper division standing. An integration of physiological, psychological and sociological understandings of the human being in relationship to physical activity as a lifelong pursuit. Topics include physical fitness, nutrition, stress reduction, socialization, and individual differences in human behavior.

#### 351 Principles of Conditioning (3)

Prerequisite: Physical Ed 260 and 348 required; 300 recommended. Conditioning for those who plan to coach or supervise fitness programs. Circuit training, nutrition, motivation, weight control and kinesiology factors.

#### 363 Developmental Adaptations of Atypical (3)

Prerequisites: Physical Ed 300, 348, 364, or consent of instructor. The disabled whose unique needs in motor development determine their least restrictive environment in physical activity. Programs of games, sports and exercise in diversified settings; legally mandated regulations.

## 364 Motor Development (3)

Prerequisites: Physical Ed 260 and 348, or consent of instructor. Life span motor development: age, sex, ethnic, cultural and perceptual components; their implications and the main course of action needed in developmental strategies for optimal motor behavior development. (6-1) musiness 9 304

#### 365 Prevention and Care of Athletic Injuries (3)

Prerequisites: upper division standing, Physical Ed 200 or consent of instructor. Focuses upon immediate observation and examination of injuries. Special emphasis will be placed upon the etiology, pathology, signs, symptoms and complications related to injuries sustained by athletes.

#### 366 Advanced Prevention and Care of Athletic Injuries (3)

Prerequisites: upper division standing, Physical Ed 365, or consent of instructor. Prevention and care of athletic injuries, administrative responsibilities, advanced treatment modalities, preconditioning, and rehabilitation. (2 hours lecture, 2 hours lab)

#### 367 Therapeutic Modalities and Rehabilitative Exercise (3)

Prerequisites: Physical Ed 365 or equivalent and/or consent of instructor. Athletic training and related sports medicine concepts including principles, techniques and effects of therapeutic modalities and rehabilitative exercise.

#### 371 Theory and Principles of Human Motor Learning (3)

Information processing as an explanation of motor learning and motor memory.

#### 371L Theory and Principles of Human Motor Learning Laboratory (1)

Prerequisite: prior completion or concurrent enrollment in Physical Ed 371. Laboratory techniques in motor learning studies. (3 hours laboratory) sambana establing to solitea estisuperer

#### 372 Movement and the Child (3)

Characteristics of the child; physical growth and development; basic mechanical principles underlying efficient movement; and programs for physical needs of children in the elementary school.

## 373 Movement Concepts (3)

Elements of movement: space, force, time, and flow. Observation, participation, analysis, and synthesis of movement experiences.

#### 380 History of Physical Education and Sport (3)

Historical development of thought and practice in athletics, sport, and physical education from ancient Greeks to the modern period with special emphasis upon the historical role of sport in American life.

#### 381 Human Movement in Cultural Perspective (3)

Prerequisite: one course from Category III.C.I. of General Education and upper division standing. Human movement in the cultural milieu. Historical and contemporary interpretations of the role of play, games, sports, dance and recreation in human life. (Physical Education majors may not double count this course for general education.)

#### 382 Philosophical Perspectives of Human Movement (3)

The meaning and significance of participation in human movement. Human movement relative to personal identity, meditation, aesthetics, values, ethics, and the nature of competition.

#### 383 Sport Psychology (3)

The role of personality and cognitive factors in human movement settings. Selected topics may include: arousal, attribution theory, achievement motivation, anxiety, interventions, attentional styles, aggression, social facilitation, social reinforcement, and imagery.

384 Sport Sociology (3)

Prerequisite: Physical Ed 381 or consent of instructor. Sport and social institutions and social processes. Understanding sport as a social phenomenon.

#### 396 Physical Education Tutorial (1)

Prerequisite: consent of instructor and tutorial adviser. Supervised experience in performance or laboratory situations through tutoring or assisting in instruction. May be repeated for six units of credit. A maximum of three units may be applied toward the

#### 408 Sports Fund Raising and Packaging (3) (Formerly 409) and American In adjusted

Prerequisites: Physical Ed 490 or equivalent. Fund raising theories and principles with application to educational, professional and commercial sports. The importance of marketing within the sports setting. Theories and principles as relevant to the intercollegiate and professional athletic leagues.

#### 414 Legal Issues in Sport and Exercise (3)

Prerequisite: senior or graduate standing. Analysis of the major legal issues involved in the conduct of amateur and professional sport and the teaching and administration of physical education. Issues include: coaching, student athlete, sports medicine, officials, spectators, facilities, equipment, contracts.

430 Applied Sport Psychology (3)

Prerequisites: Physical Ed 383 required. Application of principles from sport psychology literature to enhance athletes' and coaches' performance,

#### 442 Teaching Physical Education (3)

Prerequisite: admission to teacher education. Objectives, methods and materials of teaching physical education K to 12. Required before student teaching. Part of the 12-unit education block and may not be taken separately. (Credit/ No Credit only. Requires B or better for credit.)

#### 449E Externship in Secondary Teaching (3)

To be taken concurrently with Physical Ed 442. See description under Secondary Education. (Credit/ No Credit only. Requires B or better for credit.)

#### 449I Internship in Secondary Teaching (10)

See description under Secondary Education. (Credit/No Credit only. Requires B or better for credit.)

#### 449S Seminar in Secondary Teaching (2)

See description under Secondary Education. (Credit/No Credit only. Requires B or better for credit.)

#### 451 Sports Medicine (3)

Prerequisites: upper division standing, Physical Ed 348 or its equivalent or consent of instructor. Factors (environmental, ergogenic, etc.) which alter the typical physiological response to exercise and training.

452 Physical Performance Testing and Counseling (3)

Prerequisite: Physical Ed 348 and 348L required; Physical Ed 351 and 451 recommended. Testing and counseling techniques used to assess and develop physical performance.

#### 454 Physical Activity and the Aging Process (3)

Prerequisite: At least two upper division physical education courses or two upper division courses from the Gerontology minor or consent of instructor. Examination of the scientific evidence concerning the relationship between level of physical activity and one's physical, mental and psychological well-being during aging.

#### 461 Biomechanics (3)

Prerequisite: Physical Ed 300 or consent of instructor. The application of biomechanics to the analysis of human movement.

#### 473 Motor Impairment (3)

Prerequisites: Physical Ed 363, 364 or consent of instructor. Identification of abnormal motor behavior of the neurologically handicapped. Assessment factors, development of educational and/or therapeutic models of remediation and action strategies. Disorders of neuromotor, convulsive, impulsive and minimal dysfunction syndrome.

#### 475 Cognitive Dimensions of Motor Performance (3)

Prerequisites: Physical Ed 371, 383. An integrated approach to the understanding of psychological processes and behavioral variables which affect the acquisition and performance of motor Brerequitaire: Physical Ed 200 and 345 required 500 recom.

#### 483 Sport in Film and Fiction (3)

Prerequisites: Physical Education 380 or 381 or 382 or 384. This course examines sport in film and fiction with emphasis on themes that can be compared with real sport experiences. Sport heroes, the aging athlete, sport in the country and city, racism, and sexism are examined through literary criticism.

#### 490 Principles of Sport and Exercise Management (3) (Formerly 390)

A broad overview of the sport/exercise management enterprise, including school, facility, professional, commercial, industrial, corporate management and specialists in marketing, print/electronic media. Job descriptions, professional preparation and placement opportunities are detailed. Portfolio development.

#### 496 Practicum (1-3)

Prerequisites: junior or senior standing and consent of faculty sponsor, field supervisors, departmental coordinator, and department chair. Planning, preparing, coaching, teaching in public school, college, or community physical education or recreation programs. May be repeated for a maximum of six units of credit. Credits not applicable toward major, or fifth year work. (Credit/ No Credit only).

#### 499 Independent Study (1-3)

Prerequisites: completion of a minimum of 15 upper division physical education units. Topics based on a study plan prepared in cooperation with a faculty supervisor. Culminates in a paper, project, comprehensive examination or performance. Maximum of three units in any one semester; may be repeated once.

#### 508 Statistical Methods in Physical Education (3)

Prerequisite: graduate status and Physical Ed 349 or equivalent. Statistical theory, data collection procedures, techniques for analysis and interpretation of data.

#### 510 Research in Physical Education (3)

Prerequisites: graduate status and Physical Ed 508. The fundamental tools of research. Types of research, process of scientific inquiry and critical analysis of research. Topic selection and development of a research proposal.

#### 516 Advanced Study of the Philosophical Perspective of Human Movement (3)

Prerequisites: graduate status and Physical Ed 382 or consent of instructor. Methods of the philosophical process and human movement.

#### 536 Contemporary Problems and Issues in Sport Management (3)

Prerequisite: graduate status and Physical Ed 490 or consent of instructor. Historical trends, current issues, and related problems of the sport and exercise industry. Job related decision-making.

#### 550 Internship (3)

Prerequisites: classified status and consent of graduate adviser. On-the-job training experiences supervised by a fully trained practitioner. Requirements include 10 hours per week of on-thejob training and one hour weekly conference with instructor. Not open to students on, or subject to, academic probation.

#### 551 Advanced Study in Physiology of Exercise (3)

Prerequisite: graduate status and Physical Ed 348 or equivalent. Theories of exercise and physiological function.

#### 552 Advanced Study in Biomechanics (3)

Prerequisite: graduate status and Physical Ed 461 or equivalent. Technique analysis of the major skills in sports. In-depth analysis of specific sports using high speed cinematography, instrumentation, computers, electromyography and electrogoniometry.

#### 554 Advanced Study in Human Motor Behavior (3)

Prerequisites: graduate status, Physical Ed 371 or consent of instructor. Current issues in motor behavior.

#### 555 Scientific Bases of Training (3)

Prerequisites: graduate status and Physical Ed 351, 348, or equivalent, or consent of instructor. Training: the physiological bases for developing the primary fitness components.

#### 556 Environment and Exercise Physiology (3)

Prerequisites: Physical Ed 348, 348L, 351, graduate status, and instructor's consent. The interrelationship between the physical environment and the human while exercising under different states of fitness and acclimatization.

## 557 Instructional Strategies in Physical Education and

Prerequisites: graduate status and Physical Education 371 or 383. Study of theoretical concepts, models, and research on instructional strategies for physical education, sport and related professional setting. Highly recommended for graduate students in all concentrations in physical education.

#### 558 Advanced Study in Teaching Human Movement (3)

Prerequisites: graduate standing and Physical Ed 300 and/or Physical Ed 371 or consent of the instructor. Provides a general overview of historical perspectives and current trends in pedagogical research and the resultant principles that undergird the science of teaching human movement. I also galleyed a margory hatel

#### 580 Advanced Study in Sport Psychology (3)

Prerequisites: graduate status and Physical Ed 383, or consent of instructor. Current issues and research in psychology and human movement. The more large rupts disabilities and its noil

#### 582 Advanced Study in Sport Sociology (3)

Prerequisites: graduate status and Physical Ed 384, or consent of instructor. The theories and methods of sociology and the study of the sport phenomenon.

#### 597 Project (3)

Prerequisites: classified status, Physical Ed 508, 510 and consent of project committee. Directed independent inquiry. Not open to students on, or subject to, academic probation.

#### 598 Thesis (3)

Prerequisites: classified status, Physical Ed 508, 510 and consent of thesis committee. Student will select and have approved a research proposal, conduct the research, and prepare a formal analysis and report. May be repeated. Not open to students on, or subject to, academic probation.

#### 599 Independent Research (1-3)

Prerequisites: graduate status, Physical Ed 508, 510, and consent of the faculty adviser and department chair. May be repeated for maximum of 6 units of credit. Student research in a specific area of human movement studies. Not open to students on, or subject to, academic probation.

## Human Services Program

Program Coordinator: Soraya Coley Program Office: Education Classroom 577

Programs Offered
Bachelor of Science in Human Services
Minor in Human Services
Multiple Subject Credential Waiver Program

#### Faculty

Soraya Coley, Gerald Corey, Mikel Garcia, Mikyong Kim-Goh, Lenore Parker, J. Michael Russell, Jerome Wright

#### INTRODUCTION

The Bachelor of Science in Human Services is a carefully articulated program providing both the academic and experiential background for the student seeking a career working with people in the varied and expanding field of human services. An application-oriented major, it is based on a synthesis of knowledge from several social sciences, together with methodologies of intervention at the individual, group and community levels. Human services graduates are educated to respond in an informed way to identifiable human service needs in a variety of settings. The program's orientation and its synthesis of knowledge from many background disciplines, as well as its focus on the development of specific methods and practical skills to apply this knowledge, give it a unique perspective.

The Human Services Program is structured around four interrelated components: theoretical foundations/intervention strategies; client population/cultural diversity; research/evaluation; and skills development/field experience.

#### BACHELOR OF SCIENCE IN HUMAN SERVICES

The requirements for the major consist of 54 units. The required core curriculum consists of 36 units (in the above four areas), plus 18-units of adviser approved courses related to one's anticipated professional specialization.

Majors must achieve a grade of C or better in all courses included in the core curriculum and in the advisement track. It is the student's responsibility to consult an adviser on the human services faculty at least once during each of her/his first two semesters on campus to develop a study plan identifying courses for the advisement track.

Community College Transfer Students: Community college transfer students may apply a maximum of 12 units of course work in human services and related fields towards the total of 54 units. Transfer of any units must be approved by the student's adviser and the Program Coordinator.



Courses required for the major total 54 units. The suggested sequence is as follows:

#### Required Core Curriculum (36 units)

Sophomore Year Samuel rismud bas and but this same 201A

Human Services 201 Introduction to the Human Services (3) Psychology 201 Elementary Statistics (3)

or Sociology 303 Statistics for the Social Sciences (3)

Note: Human Services 300, Character and Conflict, is required in the paraprofessional counseling advisement track and should be taken early in the program.

Junior Year: First Semester

Human Services/Counseling 380 Theories and

Techniques of Counseling (3)

Afro/Human Services 311 Intracultural

Socialization Patterns (3)

Psychology 361 Developmental Psychology and ban and or Child Development 312 Human Growth and

Development (3) The MEMBER and Day SMICA LINES OF A

Psychology 341 Abnormal Psychology or Sociology 451 Sociology of the Family (3)

Junior Year: Second Semester

Human Services 396 Practicum Seminar (2) and Human Services 396L Practicum\* (1)

Sociology 305 Techniques of Social Welfare (3)

Advisement Track Course(s)

Senior Year: First Semester was always at endowing a landstoods

Human Services 385 Program Design and Proposal to actual group structions. (Some as Counseling (S) gnitirW

Human Services 495 Fieldwork Seminar (2) and Human Services 495L Fieldwork\* (1)

Advisement Track Course(s) a solving manual regularity of T

Senior Year: Second Semester obodism stationage aninimises b

Human Services 470 Evaluation of Human Services Programs (3)

Human Services 496 Internship Seminar (2)

and Human Services 496L Internship\* (1-3)

Advisement Track Course(s)

ence statistics course. Making program objectives measurab

#### Required Advisement Track (18 units)

In addition to the 36-unit core, the human services degree program requires each student to select, in consultation with an adviser, an 18-unit advisement track in the area of her/his anticipated professional specialization. Examples of advisement tracks include: gerontology, multiple subject (elementary) teacher education, mental health, and community, agency, and organizational practice. Students are expected to consult with an adviser during their first semester in the Human Services Program to develop a study plan. (EVI) Ichoniff meburik-oranaking 301

Note: Human Services 300, Character and Conflict, may be used as an elective in advisement tracks; consult an adviser for further information. 2 months and the rowers and sold when ribers

## MINOR IN HUMAN SERVICES

The minor in Human Services, consisting of 21 units, may be of interest to students preparing for careers in the helping professions, as well as students with a personal interest in this field. The minor provides a structured selection of courses offered by the Program which can complement other majors and minors by providing practical applications of theory, foundations, self-exploration and supervised fieldwork in a human services setting.

Required Foundation Courses: 9 units

Human Services 201 Introduction to Human Services (3)

Human Services 311 Intracultural Socialization Patterns (3) Patte

Human Services 380 Theories and Techniques of Counseling (3)

Electives: Select 3-9 units from the following and on A an ama?)

Human Services 300 Character and Conflict (3)

Human Services 385 Program Design and Proposal Writing (3)

Human Services 400 Ethical and Professional Issues in Human Services (3) supindost bas estimated visaggmentage to vevide

Human Services 410 Crisis Intervention (3) and services of T

Human Services 416 Group Process and Membership (1-3)

Human Services 420 Management of Human Services (3)

Human Services 450 Theory and Practice of Group

Counseling (3) and Western Losson Phonosoft Western 288

Human Services 470 Evaluation of Human Services

Programs (3) abud makeb maryong to saupindosT notourism

Human Services 480 Case Analysis and Intervention

ment methods; survey of needs assessment p (6) repinded.

Fieldwork: Select 3-9 units from the following

Human Services 396/396L Practicum Seminar (2) and Practicum (1) Practicum of human service of human service (1)

Human Services 495/495L Fieldwork Seminar (2) and Fieldwork (1)

Human Services 490 Practicum in Group Leadership (3) Human Services 496/496L Internship Seminar (2) and Tage Prerequisite: Human Services 201. Corequis (6-1) qidanranl

#### MULTIPLE SUBJECT CREDENTIAL WAIVER

A carefully selected sequence of courses taken in conjunction with the human services major has been approved by the State of California as a waiver for the General Knowledge Core Battery portion of the National Teachers' Examination. One requirement for a Multiple Subjects (Elementary) Teaching Credential is completion of a waiver program or passing scores on the (NTE) General Knowledge Core Battery. Contact the Credential Preparation Center for further information.

<sup>&#</sup>x27;The practicum/fieldwork/internship courses (Human Services 396 and 396L, 495 and 495L, and 496 and 496L) must be taken in sequence. Only one fieldwork course work may be taken in a given semester.

#### **Human Services Courses**

#### 196 Student-to-Student Tutorial (1-3)

Prerequisite: Approval of Program Coordinator. Students gain tutoring experience with peers needing special assistance on a one-to-one basis or in small group settings. 1-3 units, credit/no credit only, does not count toward the Human Services major/ minor or G.E. requirement.

#### 201 Introduction to the Human Services (3)

The origin and scope of human services including theoretical frameworks, the functions and activities of human services organizations, and the roles and related skills of human services workers.

#### 300 Character and Conflict (3)

Prerequisite: consent of instructor at first class meeting. An experiential, theme-oriented class exploring life choices in the struggle for personal autonomy. Themes include: body image, sex roles, love, sexuality, intimacy, marriage, alternative life-styles, loneliness, death, meaning and values. Credit/no credit only.

#### 311 Intracultural Socialization Patterns (3)

(Same as Afro Studies 311)

#### 380 Theories and Techniques of Counseling (3)

Prerequisite: upper division standing or consent of instructor. Survey of contemporary theories and techniques of counseling. The counseling process, comparison of various theoretical approaches, introduction to professional and ethical issues. (Same as Counseling 380)

#### 385 Program Design and Proposal Writing (3)

Prerequisites: Human Services 201; 396 and 396L, or consent of instructor. Techniques of program design, budgeting and staffing of human service programs; proposal writing and fund development methods; survey of needs assessment procedures.

#### 396 Practicum Seminar (2)

Prerequisite: Human Services 201. Corequisite: Human Services 396L. Functions and structure of human services agencies; interrelationships with community services; the role of the human services worker; ethical, legal and professional issues.

#### 396L Practicum (1)

Prerequisite: Human Services 201. Corequisite: Human Services 396. Field placement in one or more human service agencies for a minimum of eight hours per week. Credit/no credit only.

#### 400 Ethical and Professional Issues in Human Services (3)

Prerequisites: Human Services 380; 396 and 396L; or Philosophy 310, or consent of instructor. A survey of ethical, legal and professional issues facing the human services worker. Designed to teach a process of ethical decision-making and to increase awareness of the complexities in practice. (Same as Philosophy 400)

#### 410 Crisis Intervention (3)

Prerequisite: Human Services 380 or equivalent. Examines the theories and techniques of short-term intervention and subsequent referral procedures. Topics include suicide, battering, AIDS, rape, death, dying and human-induced disasters in the community.

#### 416 Group Process and Membership (1-3)

Prerequisites: Human Services 300 and 380. A didactic and experiential overview of stages of group development, impact of members on group identity, group member and leader issues. Survey of various counseling groups. May be repeated for credit. Credit/no credit only. (Same as Counseling 416)

#### 420 Human Services Management (3)

Prerequisites: Human Services 385. Issues in administration and management of human services in community agencies. Topics include assessing client needs, designing human service delivery systems, program budgeting, marketing strategies, accountability, and improving program management.

#### 430 Child Abuse and the Human Services (3)

Prerequisites: Human Services 201 or equivalent. Introduction to types and symptoms of abuse, assessment techniques, legal and ethical issues, family dynamics pertaining to children, adolescents, and adults abused as children. Special topics include networking and referral, utilizing community resources and pre-

#### 450 Theory and Practice of Group Counseling (3)

Prerequisites: Human Services 300 and Human Services 380 and consent of instructor. A critical evaluation of ten contemporary theoretical approaches to group counseling as well as issues in group work. Emphasis is upon applying theories and techniques to actual group situations. (Same as Counseling 450).

#### 470 Evaluation of Human Services Programs (3)

Prerequisites: Human Services 385 and an elementary social science statistics course. Making program objectives measurable; determining appropriate methodology and techniques to evaluate effectiveness, efficiency and process variables; practical problems of program evaluation.

#### 480 Case Analysis and Intervention Techniques (3)

Prerequisites: Human Services 380, 396 and 396L; Psychology 341. Techniques of counseling; appropriateness in the utilization of theoretical modalities; case writing; various counseling intervention methods suitable for a culturally diverse population. Role-playing and videotape observations of actual counseling encounters. (Same as Counseling 480)

#### 490 Practicum in Group Leadership (3)

Prerequisites: Human Services 300, 380 and consent of instructor. Supervised experience as a group leader. Approaches and techniques of group leadership. May be used as a substitute for 496/496L. Coordinator approval needed for substitution for 496/ 496L. May be repeated once for credit.

#### 495 Fieldwork Seminar (2)

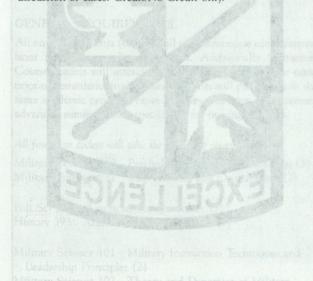
Prerequisites: Human Services 396 and 396L. Corequisite: Human Services 495L. Classroom analysis of agency experience focusing on skills and techniques of human service workers and organizational analysis.

#### 495L Fieldwork (1)

Prerequisites: Human Services 396 and 396L. Corequisite: Human Services 495. Supervised fieldwork in one or more human service agencies for a minimum of eight hours per week. Credit/ no credit only.

#### 496 Internship Seminar (2)

Prerequisites: Human Services 495 and 495L and at least two courses in approved specialization. Corequisite: Human Services 496L. Supervised internship in a community service agency in area of specialization. Seminar consists of group supervision and discussion of cases. Credit/No Credit only.



#### 496L Internship (1-3)

Prerequisite: Human Services 495 and 495L. Corequisite: Human Services 496. Each unit of credit requires 120 hours of supervised internship experience in one or more human service agencies in one semester, or eight hours weekly for each unit of credit. Credit/No Credit only.

#### 499 Independent Study (1-3)

Prerequisites: approval of coordinator, consent of instructor, upper-division status. Individual research project, either library or field, under the direction of a faculty member. May be repeated for credit. Only three units per semester.

## Military Science Program (Army ROTC)

Coordinator: Major John Sarnecky Assistant Coordinator: Captain Mark Godina Operations Sergeant: Master Sergeant Alan Mitchell Administrative Sergeant: Sergeant First Class Ronald Grahm Department Office: Faculty Terrace North 301

Program Offered Minor in Military Science

#### INTRODUCTION

Military Science is the study of the causative factors and the tactical principles of warfare. ROTC provides an added dimension to the university by offering the student applied leadership and management education and experience found in few other college courses. Military Science courses are accredited and open to the entire academic community. Full-time enrolled students in all academic disciplines are eligible to enroll as cadets in accordance with university and Department of Defense policy. Threeyear and two-year merit scholarships are available and awarded on a competitive basis.

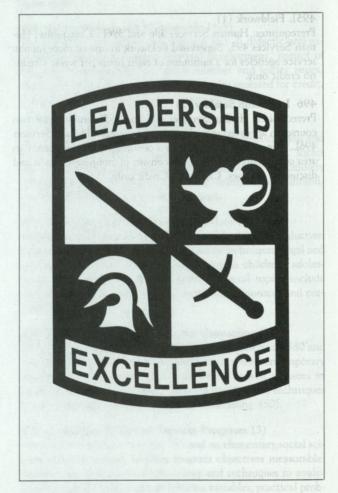
For successful completion of the ROTC program and to receive a commission in the United States Army, the following Professional Military Education subject areas must be included in your college program (as approved by the Military Science Coordinator):

Written Communications Military History Human Behavior Computer Literature Math Reasoning

Upon successful completion of all requirements, cadets are commissioned as second lieutenants in the Army Reserve or National Guard.

#### Four-Year Program

This program is comprised of a "Basic Course" and an "Advanced Course." The "Basic Course" is normally taken during the freshman and sophomore years and is comprised of courses from many disciplines while the "Advanced Course" is normally taken during the junior and senior years and concentrates on military subjects. "Basic Course" participation is done on a voluntary basis without obligation. However, upon entry into the "Advanced Course," cadets are required to execute a contract with the Department of the Army agreeing to complete the ROTC program and accept a commission as a second lieutenant. "Advanced Course" cadets will receive up to \$1,000 a year along with free uniforms and books for all military science courses.



#### Two-Year Program

This program is for those students who have at least four semesters of work remaining on campus as either an undergraduate, graduate or combination thereof, who, for whatever reason, did not participate earlier. These students must attend either the ROTC Basic Camp or have completed Military Basic Training to gain eligibility for "Advanced Course" enrollment. Upon successful completion of either training program, the student is then eligible for contracting as an "Advanced Course" cadet under the same benefits, requirements and guidelines as the four-year students.

#### MINOR IN MILITARY SCIENCE

The Military Science Minor is comprised of a combination of courses from many disciplines totalling 24 units. Students interested in this program should seek additional information from the Military Science office.

#### GENERAL REQUIREMENTS

All enrolled students (cadets) will take one course each semester from the following list of courses. Additionally "Advanced Course" cadets will attend a six-week advanced summer camp prior to commissioning. Nursing students will participate in the same academic program; however, they will attend an alternate advanced summer camp specifically for nursing students.

All four-year cadets will take the following courses:

Military Science 210 Psychology of Military Leadership (3) Military Science 281 Map Reading and Orienteering (2)

Poli Sci 352 American Foreign Policy (3)\* History 393 American Military History (3)\*

Military Science 101 Military Instruction Techniques and Leadership Principles (2)

Military Science 102 Theory and Dynamics of Military Organizations (2)

Military Science 201A Leadership Laboratory (1)

Military Science 201B Leadership Laboratory (1)

Military Science 301 Ethics for the Military

Professional (3)

Criminal Justice 325 Contemporary Military Justice System (3)

All cadets will enroll in Military Science 100 Army Physical Training each semester, as well as participate in a one-hour weekly cadet formation.

### Military Science Courses

100 Army Physical Training (1)

A fitness overview designed to improve student techniques in developing, maintaining, instructing, and leading an organization level physical training program. Principles of cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and military technique will be emphasized. May be repeated for credit.

#### 101 Military Instruction Techniques and Leadership Principles (2)

Techniques of military instruction enhanced by practical exercises and leadership principles are examined through the use of case studies, both enriched by leadership laboratories.

#### 102 Theory and Dynamics of Military Organizations (2)

Prerequisite: Military Science 101 or consent of the instructor. Theory in planning and organizing the deployment of small milisary foundation for graduate education as a second tary units.

#### 201A Leadership Laboratory (1)

Application to military organization and management. Development of objectives, plans and proper execution of military skills training exercises. The description of the second of the s

#### 201B Leadership Laboratory (1)

Prerequisite: Military Science 201A. Application of the concepts of military organization, staffing and training management. Advanced training in the proper execution of military training exer-

#### 210 Psychology of Military Leadership (3) (Same as Psychology 210)

#### 281 Map Reading and Orienteering (2) (Same as Geography 281) graffyon and drive) ymothau graff

#### 301 Ethics for the Military Professional (3)

Ethical dimensions of professional decision making, leadership, crisis-management, the responsibilities of officers and officials, and comparisons between military and civilian roles.

#### 325 Contemporary Military Justice System (3) (Same as Criminal Justice 325)

<sup>\*</sup>Similar courses may be approved by the Program Coordinator

## Department of Nursing

Department Chair: Julia George Department Office: Education Classroom 105

Program Offered Bachelor of Science in Nursing

Faculty Julia George, Arlene Blix and and antipopaged contient of the state of

## Leadership Frinciples (2) Techniques of military ingress from entry (NOTOUCTON)

The major in nursing is designed to provide registered nurses with knowledge, skills and attitudes necessary for the performance of the professional nursing role and characteristic of the generally educated person. The program prepares a nursing generalist who can provide care within a framework of scientific and professional accountability, and can function independently in a variety of health settings. The program provides students with the necessary foundation for graduate education and specialization and promotes and fosters commitment to lifelong learning for personal and professional growth.

#### BACHELOR OF SCIENCE IN NURSING

The curriculum offers to the registered nurse with an associate degree in nursing (or its equivalent) an upper-division program leading to a bachelor of science degree with a major in nursing. Graduates are eligible for certification as public health nurses in the State of California.

The program is accredited by the National League for Nursing.

#### Admission Requirements

- 1. Meet requirements for admission to the university as a transfer student.
- 2. Completion of an associate degree in nursing or its equivalent.
- 3. Current licensure as a registered nurse in California.
- 4. Completion of one college level course in each of the following: anatomy (with laboratory), physiology (with laboratory), chemistry (with laboratory), microbiology (with laboratory), psychology, and sociology or anthropology. A minimum grade of C must be attained in each course.
- 5. Completion of one year of satisfactory work experience as a registered nurse is recommended.



Admission Procedures Students are accepted into the nursing program twice each year in the fall and spring semesters.

- 1. Submit a university application and an official transcript of all previous college work to the Office of Admissions and Records.
- 2. Submit a nursing application form to the Nursing Program office with a transcript copy of all previous college work and two letters of reference from previous employers or instructors.
- 3. Group information sessions are available each semester for prospective students.
- 4. Entry tests will be required prior to and during the first clinical nursing course. Results will be used for counseling purposes. A fee is charged.

#### Program Regulations

- 1. All required nursing and support courses must be taken in sequence. Check each nursing course for prerequisites and corequisites. Students may enroll in only one clinical course (Nursing 305L, 355L, 402L and 452L) per semester.
- 2. Students must apply for the clinical nursing courses each semester prior to enrollment in the class. (November 1 deadline for spring semester and April 1 for fall semester.) Enrollment in the seminar and clinical sections is limited to 10-15
- 3. Students must maintain a cumulative 2.0 grade-point average on all units attempted and attain a minimum grade of C in all nursing and support courses.
- 4. The student who earns less than a grade of C in nursing or support courses must repeat that course prior to being admitted into the next nursing course in sequence. A nursing or support course may be repeated only one time and requires departmental consent.
- 5. Students must have current RN licensure, malpractice insurance, current CPR certificate, proof of 2 MMR or of immunity status for MMR, verification of annual TB testing with appropriate followup, and access to transportation in order to be admitted into clinical courses. Nursual session of the session
- 6. Students are required to make an appointment with advisers at least once each semester.
- 7. Professional standards are to be maintained. A student who demonstrates unprofessional behavior or behavior which indicates unsafe practice may be denied progression or may be dismissed from the program. Refer to Nursing Student Handbook for complete progression and retention policy.
- 8. Any student with a lapse of five years between clinical nursing courses must take a placement test and remediation, if necessary, before admission to the subsequent clinical nursing courses.

#### Scholarships, Awards, Financial Aid

Financial aid and community scholarships are available.

Outstanding senior student, W. J. Traber Humanism Award, and Vera Robinson Humor Award are given to graduating seniors.

#### Requirements for the Degree

The total number of units required for the Bachelor of Science in Nursing is 128. This consists of a specific combination of prerequisites, general education, nursing and elective courses.

The following courses are required for the nursing major: Nursing 300, 305, 305L, 307, 320, 353, 355, 355L, 357, 400, 400L, 402, 402L, 450, 450L, 452, and 452L (43 units); and upper-division statistics course (3 units). Total: 46 units.

All students must complete the university upper-division baccalaureate writing requirement, which includes the Examination in Writing Proficiency. Nursing 305 is approved as the upper-division writing course. olavda anus mana landous apollocia bas

#### Baccalaureate Plan of Study and Added Jamingo Study

Students may attend full-time or part-time.

Junior Year: First Semester

Nursing 300 Nursing Theories: Bases for Professional Practice (3) Nursing 305/L Professional Nursing I (Laboratory) Clinical)\* (3, 2) Research resulted rate Ordinals to noberolo

Nursing 307 - Health Promotion: Parent-Child Nursing (3) General Education/Electives (3)

Junior Year: Second Semester of the proposition of seemlew

Nursing 320 Process of Teaching in Nursing (2)

Nursing 353 Alterations in Health Status: Applications in Prerequisites: upper division standing or consec (4) gnismN

Nursing 355/L Professional Nursing II (Laboratory/ bet Clinical)\* (3, 2) or sentlered when more actually editional territories to the control of th

Nursing 357 Health Promotion: Adult-Aged Nursing (3) General Education/electives (3) whaledoo bas garbassers bas

Senior Year: First Semester

Nursing 400/L Professional Dimensions of Nursing (3)

Nursing 402/L Community Health Nursing (Clinical)\* (3, 3)

Statistics (upper division) (3) applications and base and applications and applications are statistics.

General Education/electives (3) daying sobulant association and an income and a second galaxies.

Senior Year: Second Semester Barganoru atanh Batsulava asulav

Nursing 450/L Nursing Research (3)

Nursing 452/L Leadership/Management in Professional Nursing (Clinical): (3, 3)

General education/electives (6) have been not provided to see the

\*Clinical courses require current RN licensure, malpractice insurance, current CPR certificate, proof of 2 MMR or of immunity status for MMR, verification of annual TB testing with appropriate followup, and access to transportation.

## **Nursing Courses**

Note: All nursing courses for majors require (1) admission to the university as a nursing major, (2) current California R.N. licensure, (3) junior standing and (4) consent of instructor.

300 Nursing Theories: Bases for Professional Practice (3)

Prerequisite: junior standing, consent of instructor. Discussion and comparison of concepts and theories from nursing, humanities and science with emphasis on their significance to the practice of professional nursing. Includes philosophy and conceptual framework of the nursing program and use of theory in the nursing process.

301 Promotion of Optimal Health (3)

Prerequisites: one course from category III. A.2 of general education and upper division standing. Advanced health concepts and practices. Common health problems, causative factors and methods for prevention. Preventive and promotive health concepts and practices explored, integrating physiological, psychosocial, spiritual, cultural, and environmental factors which inhibit or facilitate optimal health. For non-nursing majors. (Same as Health 301)

302 The Health Delivery System and the Consumer (3)

Prerequisites: upper-division standing, and completion of G.E. requirements III.A.1 and III.C.1., or consent of instructor. Exploration of Health Care Delivery Systems (HCDS) with emphasis upon consumer and cost-effective health care. Analysis of the HCDS crises; comparison to other nations; ethics and technology; and the role of health professionals in the promotion of wellness are included. Open to non-nursing majors.

#### 303 Women's Health and Healing (3)

Prerequisites: upper division standing or consent of instructor. Analysis of issues affecting women's health across the lifespan, utilizing literature from many disciplines to provide an integrated approach. Improvement of health care consumerism, feminist understanding, and scholarly inquiry concerning women's health concerns are goals. Open to non-nursing majors.

#### 305 Professional Nursing I (3)

Pre- or corequisite: Nursing 300; Focuses on professional nursing role, written and oral communication theory and principles and the nursing process. Includes psycho-social concepts relative to health of the individual. Influence of culture, role, social support, and values evaluated. Meets undergraduate writing requirement.

#### 305L Professional Nursing I: Laboratory/Clinical (2)

Pre- or corequisite: Nursing 300. Corequisite: Nursing 305. Focuses on interaction and socialization into the professional role. Students utilize nursing process with clients exhibiting psychosocial-spiritual-cultural risks to health. Competence in critical thinking, evaluation and writing is facilitated.

306 Health and Safety for Early Childhood (3)

Prerequisite: R.N. License, or Child Development 320, or Child Development 325, or equivalent. Focus on preventative measures for child care professionals to promote safe, healthy environments at home, play or group care. Assists individuals who supervise and care for young children to recognize, differentiate and respond to common safety hazards, illness and injuries.

#### 307 Health Promotion: Parent-Child Nursing (3)

Prerequisite or corequisite: Nursing 300. Theories and issues important in parent-child nursing. Specific nursing interventions useful in promoting health relative to developmental change. Topics explored: genetic counseling, parent-child bonding, sexuality, adaptation patterns from conception through adolescence, cultural determinants.

320 The Process of Teaching in Nursing (2)

Prerequisites: Nursing 300, 305 and 305L. Nursing knowledge and skills in clinical teaching situations with individuals, families and groups. Content includes theories and principles of learning, teaching strategies and methodologies, teaching resources and evaluation of instruction.

#### 350 Nutrition: Vital Link to Better Health (3)

Prerequisites: Chemistry 111 or comparable course. Concepts of nutrition as they relate to nutritional needs, practices and problems throughout the life cycle. Emphasis on nutritional counseling and education of individuals/groups toward health promotion and disease prevention. Open to non-nursing majors.

#### 353 Alterations in Health Status: Applications in Nursing (4)

Prerequisite: Junior standing in nursing or consent of instructor. Corequisite to Nursing 335, 355L. Nursing 300 is to be taken prior to or concurrent with N353. Discusses alterations in health status and their applications to nursing practice. Addresses alterations at the cell and system levels, and potential resulting functional changes. Epidemiological approaches and clinical case studies will be presented to support nursing assessments and interventions.

355 Professional Nursing II (3)

Prerequisites: Nursing 305, 305L. Corequisites: Nursing 353 and 355L. Adult health assessment including common variations found in the child and older adult. Analysis of health data and identification of health risks of specific groups emphasized. Research findings used to support nursing interventions to reduce risk and promote health.

#### 355L Professional Nursing II: Laboratory/Clinical (2)

Prerequisites: Nursing 305, 305L. Corequisites: Nursing 353 and 355. Students practice history taking, physical examination techniques and risk identification on peers in supervised oncampus setting. Students apply these skills and intervene to reduce risk and/or promote health with individual clients.

#### 357 Health Promotion: Adult-Aged Nursing (3)

Prerequisite: Nursing 300. Developmental theories of adulthood and the aging process. Selected topics (divorce, retirement, death and illness, other anticipated and unanticipated life events) examined with emphasis on adaptation to developmental and situational stressors and nursing interventions.

#### 400 Professional Dimensions of Nursing (2)

Prerequisites: junior level nursing courses. Corequisite: Nursing 400L. Analysis of social trends and issues affecting nursing and health care. Bioethics, health care legislation and roles of professional organizations are examined. Nursing leadership tasks are explored in relation to group dynamics, values clarification and ethical decision-making.

#### 400L Professional Dimensions of Nursing: Laboratory (1)

Prerequisites: junior level nursing courses. Corequisite: Nursing 400. Understanding of group dynamics theory by assuming leader and member roles. Actual and potential stressors are explored and communication patterns analyzed. Includes examination of pending legislation, health planning, professional organizations and community health advocacy groups.

#### 401 Epidemiology (3)

(Same as Health Science 401)

#### 402 Community Health Nursing (3)

Prerequisites: junior level nursing courses. Corequisite: Nursing 402L. Theories of community health and nursing synthesized to help students facilitate the adaptation process of clients, families and communities to attain and maintain optimal health. Emphasis on family health care, assessment of community health needs, advocacy, collaborative role.

#### 402L Community Health Nursing: Clinical (3)

Prerequisites: junior level nursing courses. Corequisite: Nursing 402. Application of community health nursing concepts to family health care in the community milieu. Students collaborate with families and others and use community resources to promote optimal family health and improve health status. (Clinical 9 hours)

#### 450 Nursing Research (2)

Prerequisites: Nursing 300, upper division statistics course. Corequisite: Nursing 450L. Historical, philosophical, and ethical aspects of nursing research. Relationship between nursing research and professional accountability. Principles and methods of research process with emphasis on evaluating research for use in leadership and professional role.

#### 450L Nursing Research: Laboratory (1) 1 3369132 to 1918814

Prerequisites: Nursing 300, upper division statistics course. Corequisite: Nursing 450. Evaluation of specific nursing studies to determine significance and applicability to nursing practice.

#### 452 Leadership/Management in Professional Nursing (3)

Prerequisites: Nursing 402, 402L. Corequisite: Nursing 452L. Nursing 450 and 450L must be taken prior to or concurrently. Theories of leadership/management; concepts of power, motivation, decision-making, change and management skills related to the professional nursing role in the health care system.

#### 452L Leadership/Management in Professional Nursing: Clinical (3)

Prerequisites: Nursing 402, 402L. Corequisite: Nursing 452. Nursing 450 and 450L must be taken prior to or concurrently. Application of leadership/management theories and skills in student-selected and faculty approved clinical settings. (Clinical 9 hours)

## 499 Independent Study in Nursing (1-3)

Prerequisites: senior standing in nursing and/or consent of instructor. Individually supervised studies and/or projects.

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## Reading Program

Program Coordinator: Ashley Bishop Department Office: Education Classroom 577

#### Programs Offered

Master of Science in Education

Concentration in Reading Reading/Language Arts Specialist Credential

Ashley Bishop, Norma Inabinette, Ruth May-Siegrist, JoAnn Carter-Wells

#### UNDERGRADUATE READING DEVELOPMENT COURSES

Lower division courses in reading (Reading 105, 201, 202, and 290), an upper-division course (Reading 320), and a remedial course are designed to assist students in developing and utilizing a problem solving approach in the critical and creative reading and thinking processes required for efficient university learning.

#### READING/LANGUAGE ARTS SPECIALIST CREDENTIAL

The Commission for Teacher Preparation and Licensing has granted approval to the Reading Program to offer a reading/ language arts specialist credential program.

Persons wishing to earn an advanced Reading Specialist Credential must make formal application to the university indicating the specific specialist credential program desired. In addition, applicants must meet the following requirements.

- 1. have completed of a bachelor's degree;
- 2. have earned a grade-point average of at least 2.50 in the last 60 undergraduate units completed and at least 3.0 in graduate units completed;
- 3. have possession of a multiple subject or single subject credential or another valid California standard teaching credential;
- 4. have successfully taught in a classroom setting.

Advisement is available to any student seeking a Reading/Language Arts Specialist Credential. New students will be assigned an adviser upon acceptance in the program. Prior to their first semester in the program students should meet with an advisor to develop a credential study plan.

#### For Further Information

Please contact the Program office, Education Classroom Building, Room 577, phone (714) 773-3356.



#### MASTER OF SCIENCE IN EDUCATION (READING)

The program is designed to help qualified individuals gain the technical knowledge and scholarship requisite to becoming reading specialists. This professional program is based on and combined with sound preparation in the liberal arts and sciences. The curriculum proposes an interdisciplinary approach to the preparation of the professional specialist in reading.

#### Admission to Graduate Standing: Conditionally Classified

University requirements include: a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see "Graduate Admissions" section of this catalog for complete statement and procedures). In addition, an applicant must have an approved major, complete an application to the Reading Department and confer with the graduate program adviser to discuss the prerequisites for attaining classified standing.

#### Graduate Standing: Classified

A student who meets the admission requirements and the following requirements may be granted classified graduate standing upon the development of an approved study plan: successful teaching experience or other approved experience; a grade-point average of 2.5 or better in academic and related work; sufficient background in reading; a satisfactory interview; and four references from school administrators, school supervisors or professors.

#### Study Plan

The final adviser-approved program of course work for the degree must include:

Core course work	Units
Reading 510 Research Design and Analysis (3) Ed Elm 536 Curriculum Theory and Development (3)	
Reading 516 Testing and Evaluation of Reading Performance (4)	
Courses for the concentration in reading	

Reading 507 Current Trends in Secondary and College Reading Programs (3)

Reading 508 Teaching Reading/Language Arts in Today's Elementary School (3)

Reading 514 Linguistics and Reading (3)

Reading 520 Computers in Reading (2)

Reading 560 Cross-Cultural Approaches to Teaching Reading/Language Arts (2)

Reading 570 Developing Literature-Based Reading/ Language Arts Programs (2)

Reading 581 Remediation of Reading Difficulties (4)

Culminating Experience ...

Reading 595 Advanced Studies (includes comprehensive examination) (1-3)

Reading 597 Project (1-3) or Reading 598 Thesis (1-3)

For advisement and further information, consult the program graduate adviser.

## Reading Courses

#### 105 Reading Speed and Efficiency (1)

Five week course to develop students flexible rate of reading and ability to efficiently comprehend and retain text information. Includes pretests, completion of practice exercises, and post evaluation.

#### 201 Academic Reading: Analyses and Strategies (3)

Analysis of reading and learning processes, reading interpretation and critical thinking strategies as applied to all types of academic reading, emphasis on integration and synthesis of academic information.

202 Vocabulary Cognition and Reading Comprehension (3) Study and analysis of general and academic vocabularies and their influence on reading comprehension and communication. Emphasis on language knowledge and the development of contextual analysis and word association processes in reading communication.

#### 290 Critical Reading as Critical Thinking (3)

Relationship of critical reading to critical thinking. Emphasis on the development of critical thinking skills with application in the interpretation, analysis, criticism and advocacy of ideas encountered in academic readings. The state of the land the lan

320 Power Reading: Rate and Critical Interpretation (3) Reading power developed through flexible rate and application of critical thought to written discourse. Emphasis on systematic processes for logically analyzing and criticizing ideas as represent-

ed in selected readings.

340 Fostering Language Growth for Reading Readiness (3)

Prerequisites: Child Development 312, Psychology 361 or equivalent or consent of instructor. Explores function of receptive and expressive language development as they relate to reading readiness in young children.

#### 480 The Teaching of Reading (4)

Prerequisite: consent of instructor. Curriculum and methods in the teaching of reading and language arts in the elementary and secondary schools. Teachers' manuals and guides are introduced and studied. A major focus will be the preparation of reading lessons for classroom settings.

#### 501 Assessment of Reading Specialist Competencies (1)

Prerequisite: consent of instructor or graduate adviser. Assessment of competencies of students entering the Reading program in preparation of the Reading Specialist Credential.

#### 507 Current Trends in Secondary and College Reading Programs (3)

Prerequisite: consent of instructor or graduate adviser. Current trends in the teaching of secondary and college reading improvement with emphasis on materials, organization and methods of instruction.

## 508 Teaching Reading/Language Arts in Today's Elementary Schools (3)

Current trends in the teaching of elementary reading/language arts. The role of the teacher as a decision-maker in the elementary reading/language arts program.

## 510 Research Design and Analysis (3)

(Same as Ed Sec 510)

## 514 Linquistics and Reading (3)

Prerequisite: consent of graduate adviser or instructor. A study of linquistics and its influence on reading materials and instruction. An analysis of trends in linquistics as they relate to the teaching of reading.

#### 516 Testing and Evaluation of Reading Performance (4)

Prerequisite: Reading 507, 508, 514 or consent of instructor. A study of the administration, evaluation, and interpretation of individual and group tests related to reading/language arts performance. Course includes in-depth analysis of a problem reader with a study of the effects of linguistic, social, physical, psychological, educational and cultural factors which may influence reading and test performance.

#### 520 Computers in Reading (2)

Prerequisites: Consent of instructor and Reading 507, 508 or equivalent. Exploration of the impact of computers on reading and language arts; investigation of the strengths/limitations and applications of varying types of software for reading/language arts development. Clinic component included.

#### 560 Cross Cultural Approaches to Teaching Reading/ Language Arts (2)

Prerequisite: Reading 507 or 508, or consent of instructor or graduate advisor. Theory and research in teaching reading/language arts to students of diverse cultural and linguistic backgrounds. Understanding issues and concepts of various approaches. Using appropriate materials and strategies for teaching literacy skills to diverse groups.

## 570 Developing Literature-Based Reading/Language Arts Programs (2)

Recommended: English 433 and/or 434 or the equivalent. Processes for developing literature based reading/language arts instructional programs. Emphasis on using literature to promote readiness for reading, independent reading skills, and positive attitudes in students.

#### 581 Remediation of Reading Difficulties (4)

Prerequisite: Reading 507, 516 or consent of instructor. Analysis and diagnosis of reading/language arts difficulties. Techniques and methods of prevention and treatment. Individual remediation of student. Primary through secondary.

#### 585 Professional Development in Reading/Language Arts (3)

Prerequisite: consent of instructor or graduate adviser. Seminar in development and evaluation of reading/language arts programs. Training in staff development and interpersonal relations with teachers, parents, consultants, and administrators. Includes writing for publication, grant proposal writing, and other professional responsibilities.

#### 595 Advanced Studies (1-3)

Prerequisite: consent of instructor or graduate adviser. Graduate seminars designed to develop competencies in such areas as behavior, teaching strategies, educational technology, program development, communication theory and interpersonal relations related to reading/language arts.

#### 597 Project (1-3)

Prerequisite: consent of instructor or graduate adviser. Individual research on an empirical project, with conferences with the instructor, culminating in a project.

#### 598 Thesis (1-3)

Prerequisite: consent of instructor or graduate adviser. Individual research with conferences with the instructor, culminating in a thesis.

#### 599 Independent Graduate Research (1-3)

Prerequisite: consent of instructor or graduate adviser. Independent inquiry for qualified graduate students. In the property of the property

## Department of Secondary Education



Chair: Paul W. Kane Department Office: Education Classroom 379

Program Offered

Basic Teacher Credential Program Single Subject Credential

#### Faculty of the end of the sequence of partial of "a" A Mag

Gerald Gannon (Mathematics Education), James Cusick (Secondary Education), Vance Wolverton (Music Education), Paul Kane, (Secondary Education), Emmet Long and Joyce Flocken (Speech Education), Helen Taylor (Business Education), Sallie Mitchell (Theatre Education), Maria Montano-Harmon (Secondary Education) David Pagni (Mathematics Education), Dorte Christjansen (Art Education), Ron Pahl (Secondary Education), Eric Streitberger (Science Education), Jackie Kiraithe (Foreign Languages Education), John White (English Education), Jon Zimmermann (Foreign Languages Education) Courses Involving Computers (3)

#### Single Subject Credentials and Waiver Programs

Although a person seeking a Single Subject Credential may complete any academic major, the person would most likely decide to complete the degree major closest to the subject field he or she wishes to be authorized to teach. CSUF offers the Single Subject credential in the following State-authorized subject fields:

Art 406 Educational Sociology (3) Business Education English (English, Speech, Theatre) analysis of cultural factors affecting the school, roles and role conflicts in the school; roles and role conflicts in the school; Government (Political Science) Wai Isloot mon grawoff anois Life Science (Biology) and rol regolond of returned TOA Mathematics Music skills to utilize computer technology. Covin notice the skills to utilize computer technology. Physical Sciences (Chemistry, Geology and Physics) Social Sciences (Anthropology, American Studies, Economics, Geography, Chicano Studies, History, Afro-Ethnic Studies, Psychology and Sociology) 440F Supervised Fieldwork in Secondary Schools (hingd Frerequisites: admission to reacher education. Observation in

## Secondary Education Courses

110 The Teaching Experience: Exploration (2)

Exploration of one's self in relation to other people in the schools and an encounter with the teaching experience through fieldwork. Accompanying seminar to help students extend their observations and explore relevant issues. (2 hours fieldwork, 2 hours seminar) (Credit/no credit only)

310 The Teaching Experience: Participation (3)

Active participation in school classrooms and analysis of the experience. Accompanying seminar will help students to analyze their fieldwork experiences. (2 hours fieldwork, 2 hours seminar) May be repeated with consent of instructor. Credit/no credit only. A "B" or better is required to receive a grade of credit.

#### 386 Adolescence (3)

The physical, social and cultural development of human adolescents and youth. Contemporary factors producing change.

404 Microcomputers for Secondary School Classrooms (3) Prerequisite: Ed Sec 310. A course for secondary school teachers to use microcomputers in computer-assisted instruction in various curriculum areas and as an instructional tool. Instructional fee.

#### 405 Methods of Teaching Secondary School Business Courses Involving Computers (3)

Prerequisites: Ed Sec 310 or equivalent; Management Science 263 and 264 or Management Science 265 or equivalent. A teaching strategies course for business education teachers. Curriculum development techniques and problems of teaching business courses involving computers. Review and evaluation of texts, software, and other materials for instruction are included. Instructional fee.

#### 406 Educational Sociology (3)

The school in the social order; the school as a social system analysis of cultural factors affecting the school; the special culture of the school; roles and role conflicts in the school policy questions flowing from social issues and school cultural relationships.

## 407 Computer Technology for the Social Studies Classroom (3)

Prerequisite: Ed Sec 310. Provides the social studies teacher with skills to utilize computer technology. Covers social studies applications in word processing, spreadsheet, database, simulations, graphics, modems and laser disc interfaces. Meets state computer requirements for clear single subject credential. Instructional fee.

#### 440F Supervised Fieldwork in Secondary Schools (4)

Prerequisites: admission to teacher education. Observation and participation in instruction in secondary school learning centers 3 hours daily. Fieldwork associated with Ed Sec 440R, 440S and 442. Taken concurrently with these courses. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

#### 440M Multicultural Education in Public Schools (3)

Prerequisite: Ed Sec 310 or equivalent. Techniques and methods for infusing multicultural elements into all subject fields in the public schools; development and evaluation of instructional strategies and resources; and examination of issues of multicultural education. May be taken Credit/No Credit or for a letter grade. A "B" or better is required to receive a grade of credit.

## 440R Instruction in Reading for Secondary School Teaching (3)

Prerequisites: admission to teacher education. Instruction in developmental reading for prospective teachers in single subjects. Taken concurrently with Ed Sec 440F, 440S and 442. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

#### 440S Foundations of Secondary School Teaching (2)

Prerequisites: admission to teacher education. Teaching competencies related to adolescent development, learning process and diagnosis of learning problems, evaluation of pupil achievement, and cultural differences of secondary school youth. Taken concurrently with Ed Sec 440F, 440R and 442. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

#### 442 Teaching-in the Secondary School (3)

Prerequisite: admission to teacher education. Strategies and techniques for teaching a specified subject in the secondary school. Required before student teaching in the specified single subject credential area. Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

Art Ed 442 Teaching Art in the Secondary School
Ed Sec 442 Teaching Business in the Secondary School
Ed Sec 4428 Teaching Social Science in the Secondary
School

Engl Ed 442 Teaching English in the Secondary School For Lang Ed 442 Teaching Foreign Languages in the Secondary School

Math Ed 442 Teaching Mathematics in the Secondary School Mu Ed 442 Principles and Methods of Teaching Music in the Public Schools

Phys Ed 442 Teaching Physical Education in the Secondary School

Sci Ed 442 Teaching Science in the Secondary School Speech Ed 442 Teaching Speech in the Secondary School Theatre Ed 442 Teaching Theatre in the Secondary School

#### 449E Externship in Secondary Teaching (3)

Prerequisite: concurrent enrollment in Ed Sec 440F, 440S and 442. Co-teaching in two secondary school classrooms. Integrated with Ed Sec 440F, 440R, 440S and 442. (See appropriate departmental offerings.) Must be taken Credit/ No Credit. A "B" or better is required to receive a grade of credit.

#### 449I Internship in Secondary Teaching (10)

Prerequisite: admission to student teaching. Full time student teaching in a specific single subject in a secondary school. (See appropriate departmental offerings.) Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

#### 449S Seminar in Secondary Teaching (2)

Co-requisite Ed Sec 449I. Seminar in problems and teaching in a single subject in secondary schools. (See appropriate departmental offerings.) Must be taken Credit/No Credit. A "B" or better is required to receive a grade of credit.

#### 499 Independent Study (1-3)

Prerequisites: senior or graduate standing, approval of instructor and department. Conduct of an individual investigation under supervision of a faculty member; investigation might be an experiment, a library study, or a creative project; only students of demonstrated capacity and maturity will be approved; adequate prerequisite study necessary.

#### 510 Research Design and Analysis (3)

Prerequisite: graduate standing. Elements of design, instrumentation, treatment of data, hypothesis testing and inference and analysis of educational data. Develop research proposal. Analyzing and evaluating research reports. (Same as Ed Admin 510, Reading 510, Spec Ed 510)

#### 550 Instructional Strategies (3)

Prerequisite: baccalaureate degree or consent of instructor. A general course in pedagogy designed for students whose profession work involves instructional responsibilities. General teaching strategies, course design, instruction planning, and student evaluation are emphasized.

#### 551 Program Evaluation in Deduction (3)

Prerequisite: Ed Sec 510 or Ed Elm 511 or equivalent. Methods of evaluating educational programs. Analysis of the models, theories, and underlying assumptions of evaluation. Data-gathering methods, analysis of data and preparation of reports.

Description Office Education Classicon 139 and

## 597 Project (1-3) Supply to an Artis O milescond compact.

Prerequisite: consent of instructor. Individual research on an empirical project, with conferences with the instructor, culminating in a project.

## Department of Special Education

Department Chair: Leo J. Schmidt

Department Office: Education Classroom 379

#### Programs Offered

Master of Science in Education

Concentration in Special Education
Advanced Specialist Credentials:
Learning Handicapped
Severely Handicapped
Resource Specialist Certificate of Competency

#### Faculty comes of date assertation they appear is adopted

Stephen Aloia, Jaime Dote-Kwan, Chaulmaine Fuller, Norma Inabinette, Leo Schmidt, Jan Weiner

#### INTRODUCTION

The mission of the Department of Special Education is to develop and implement a curriculum which prepares persons who work with individuals with exceptional needs. This curriculum is designed to give credential and master's degree candidates a broad background in the physiological, environmental and social aspects of exceptionality. It also provides them with the opportunity to develop skills for managing environmental situations to bring about change and assist exceptional persons to be responsible for their own choices and development.

## GENERAL INFORMATION REGARDING CREDENTIAL PROGRAMS

The curriculum in specialist preparation meets the requirements of Teacher Preparation and Licensing Act of 1970. The curricula are subject to change pending approval by the Commission for Teacher Preparation and Licensing. Students are advised to contact the special education office for appropriate publications in the event curricular modifications are introduced by commission action.

Note: Students who have not previously done so must pass the California Basic Education Skills Test before they can be recommended for a Special Education Specialist Credential. This requirement should be completed early in the program.

#### Specialist Credentials

Programs leading to two specialist credentials are available. They are:

 Specialist credential to teach the learning handicapped (including the learning disabled, behavior disordered and educationally retarded).



2. Specialist credential to teach the severely handicapped (including the trainable mentally retarded, severely-multiply-handicapped, seriously emotionally disturbed and the autistic).

All specialist training programs require a generic component and advanced specialist component, for the credential. Completion of the generic component is prerequisite to admission to advanced specialist component.

Persons wishing to earn an advanced Special Education Specialist Credential must make formal application to the university indicating the specific specialist credential objective. In addition, applicants must meet the following requirements:

- 1. completion of a bachelor's degree;
- 2. presentation of a grade-point average of at least 2.75 in the last 60 units earned; and
- 3. possession of a preliminary multiple subject or single subject credential or another valid California standard teaching credential.

Advisement is available to any student seeking an advanced specialist credential in the Department of Special Education. New students will be assigned an adviser during the first month of the term in which they enter the Department of Special Education. Students should meet with their adviser during the first semester of enrollment in the Department of Special Education to file a credential study plan.

#### ADVANCED SPECIALIST CREDENTIALS

Each of the two advanced Special Education Specialist Credential programs includes a generic entry core and a specialization focus within the sequence of courses. Students should contact an advisor prior to initiating the study for an Advanced Specialist Credential. This action will ensure the student of being fully aware of current changes or modifications in the credential program that may have been initiated by the Commission on Teacher Credentialing.

#### RESOURCE SPECIALIST CERTIFICATE OF COMPETENCY

The curriculum for the Resource Specialist Certificate of Competency is designed to prepare candidates having approved entrylevel skills and professional preparation to assume the role as resource specialists in programs serving special education students, their parents and their regular teachers. The certificate program meets the competencies set forth by the California Commission for Teacher Preparation and Licensing as well as additional standards deemed appropriate by the faculty of the Department of Special Education, other university personnel and community advisory board members. Students desiring this certificate without enrolling for a degree or credential should apply for admission to the university as postbaccalaureate with a Resource Specialist objective.

#### Prerequisites

- 1. A 3.0 GPA in teacher presentation coursework.
- 2. If not already accomplished, passage of the California Basic Education Skills Test.
- 3. Appropriate Advanced Specialist Credential in Special Education.

Students should contact a department advisor prior to initiating a program for the R.S.P. Certificate. This action will ensure the student of being fully aware of current changes or modifications in the Certificate Program that may have initiated by the Commission on Teacher Credentialing.

Note: Verification of three years of successful teaching involving regular class and special education experience is necessary before the certificate will be granted.

#### MASTER OF SCIENCE IN EDUCATION (SPECIAL EDUCATION)

The program is designed to: (1) help individuals interpret and implement research related to exceptional children, conduct appropriate research in the classroom and/or clinical setting, become skilled in their abilities to diagnose and assess functional and academic problems such as reading impairment with educational instruments and observation techniques, interpret the results of diagnostic procedures, prescribe and implement educational strategies; (2) provide teachers with competencies to enable them to fulfill the roles of supervising teachers and demonstration teachers in special classes; (3) prepare individuals for positions of leadership in the field of special education; and (4) prepare individuals to pursue graduate work toward the doctoral degree.

#### Admission to Graduate Standing: Conditionally Classified

Requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.75 in the last 60 semester units attempted (see the "Graduate Regulations" section of this catalog for policies and procedures regarding admission).

#### Graduate Standing: Classified of heart plants of the standing of the standing

A student who meets the admission requirements and the following requirements, may be granted classified graduate standing upon the development of an approved study plan: (1) a gradepoint average of 2.75 or better in all previous academic and related work; (2) an approved major; (3) completion of Special Ed 371 Exceptional Individual; (4) satisfactory interview and autobiography; (5) fulfillment of the Graduate Writing Requirement before completing more than nine units. Special Ed 510 fulfills the graduate writing requirement.

#### Study Plan

The adviser approved 30 units on the study plan will include the following:

openia and ou	nits
Core course work	15
Special Ed 510 Research Design and Analysis (3)	
Special Ed 520 Seminar in Measurement: Atypical Children (3)	
Special Ed 529 Resource Specialist Seminar: Consult/Inservice Skills (3)	
Special Ed 530 Graduate Seminar: Giftedness/ Creativity (3)  or Special Ed 531 Seminar in Development Disability (3)  or Special Ed 532 Learning Disabilities Seminar (3)	
Special Ed 586 Curriculum Issues in Special Education (3)	
Electives	12
Minimum 6 units of 500-level courses; maximum 6 units of 4 level; maximum 6 units from other departments. Electives may be chosen from the following with adviser proval: Special Ed 421, 463, 464, 481, 484, 513, 522, 530, 531, 532, 599	ap- 28,

graduate adviser.

Special Ed 597 Project

## Special Education Courses

#### 371 Exceptional Individual (3)

Children who deviate from the average in the elementary and the secondary schools; physically handicapped, mentally retarded, gifted, socially maladjusted, and emotionally disturbed. Special educational services, curriculum, procedures, and materials.

#### 400 Early Childhood — Special Education (3)

Prerequisite: Child Development 320 or equivalent course in normal infant and early childhood development. Early childhood-special education provides intervention for newborns, infants, and toddlers with disabilities and those at-risk for developmental delays. Rationale for early intervention, service delivery approaches, and intervention program models will be presented.

#### 411 Mainstreaming (3)

A course designed to assist regular and special class teachers, school administrators and parents to implement the "Least Restrictive Environment" placement requirement of Public Law 94-142. Emphasis will be placed upon techniques to modify regular classrooms in order to accommodate handicapped children.

## 421 Working With Parents of Children With Exceptional Needs (3)

Patterns and problems of child rearing in families with exceptional children. Role of teachers and other professionals in developing cooperative programs involving parents and/or other family members. Community resources. Designing change programs.

#### 462 Practices and Procedures in Special Education (3)

Prerequisite: Special Ed 371 or consent of instructor. Critical examination of current procedures, laws and judicial litigation, and related practices in Special Education. Emphasis on issues of multicultural perspective, federal, state, and community resources. Field assignments required.

## 463 Characteristics of Learning Handicapped Individuals (3) Prerequisites: Special Ed 371 or consent of instructor. Individuals who deviate from the norm in cognitive and emotional functioning; the educable mentally retarded, gifted, slow learner, behaviorally disordered and emotionally disturbed.

# 464 Characteristics of Severely Handicapped Individuals (3) Prerequisite: Special Ed 371 or consent of instructor. Individuals who deviate from the norm in physical-sensory functioning; the visually handicapped, multiply handicapped, physically handicapped, and trainable mentally retarded.

#### 481 Measurement in Special Education (3)

Prerequisite: Special Ed 371 or equivalent. The practical and theoretical aspects of measurement and assessment in special education. Teacher-made as well as commercial test as they relate to special education will be considered. Interpretation of multicultural and ethical problems will be considered.

## 482A Exceptionality: Curriculum and Methods for the Learning Handicapped (3)

Prerequisites: Special Ed 462 and 463. Curriculum development, methods and materials for teaching the learning handicapped. Lectures, demonstrations and practicum.

## 482B Exceptionality: Curriculum and Methods for the Severely Handicapped (3)

Prerequisite: Special Ed 462 and 464. Curriculum development, methods and materials for teaching the severely handicapped. Lectures

#### 484 Exceptionality: Noneducational Implications (3)

Prerequisite: Special Ed 371 or 411. Economic and social implications of exceptionality. The adjustment of the exceptional individual to society. Society's accommodation to the individual.

#### 489A Directed Teaching in Special Education (A) (6)

Prerequisite: Special Ed 371, 421, 462, 463, 481, 482A and Department approval. Directed teaching in department-approved Learning Handicapped placement to meet California Advanced Specialist Credential requirements. Students must achieve a minimum of 80% success on specified competencies within assigned field site and seminars. Must be taken credit/no credit.

#### 489B Directed Teaching in Special Education (B) (6)

Prerequisite: Special Ed 371, 421, 462, 464, 481, 482B and Department approval. Directed teaching in department-approved Severely Handicapped placement to meet California Advanced Specialist Credential requirements. Students must achieve a minimum of 80% success on specified competencies within assigned field site and seminars. Must be taken credit/no credit.

#### 490 Field Studies: Special Education (1-3)

Prerequisite: Special Ed 371 or Special Ed 400 and consent of Department Chair. Supervised practicum/field or clinical experience with exceptional individuals related to skills and competencies specified for the completion of University- or State-approved endorsements or certificates. May be repeated for credit. Must be taken credit/no credit.

#### 496 Senior Educational Practicum (1-3)

Conduct at an advanced level an educational practicum with educationally handicapped children.

#### 499 Independent Study (1-3)

Prerequisites: senior or graduate standing and consent of instructor. Individual studies under the direction of faculty member. Experimental, library, or creative projects.

#### 510 Research Design and Analysis (3)

(Same as Ed Sec 510)

#### 520 Seminar in Measurement: Atypical Children (3)

Prerequisite: Special Ed 481 or equivalent. Principles of measurement and the evaluation of atypical children. Areas covered: teacher design tests; normed tests and exceptional children; and using test for instructional planning.

#### 522 Behavior Problems in the Classroom (3)

Prerequisite: Special Ed 371 or consent of instructor. Identification and management of social and affective disturbances related to school performance. Early detection, behavioral modification techniques, parent counseling, interagency cooperation.

## 528 Resource Specialist Seminar: Curriculum,

Assessment and Management (3)

Prerequisites: Special Ed 463 and 464. Designed to prepare teachers to perform the coordination tasks of resource specialists. Focus is on curriculum, legal requirements of resource specialists programs, coordination functions and skills, and direct service to teachers and students.

#### 529 Resource Specialist Seminar: Consulting and Inservice Skills (3)

Prerequisites: Special Ed 463 and 464. To prepare teachers to perform consultation and staff development tasks required of resource specialists. Focus: collaborative consultation with other teachers, content and format for inservice activities, skills needed when working with decision-making groups.

#### 530 Graduate Seminar in Giftedness and Creativity (3)

Prerequisite: Special Ed 463 or consent of instructor. An examination of varieties of higher cognitive functioning and those characteristics or performances described as creativity. Focus on ways to enhance skills in analysis, synthesis, evaluation, creative problem solving and divergent productions.

#### 531 Exceptionality: Seminar in Developmental Disabilities (3)

Prerequisite: Special Ed 463 or 464 or consent of instructor. Analysis of selected problems in the field of developmental disabilities with major emphasis upon independent investigation into contemporary theoretical and research contributions.

#### 532 Learning Disabilities Seminar (3)

Prerequisite: Special Ed 463 or equivalent and consent of instructor. Analysis of selected problems in the field of learning disabilities with major emphases on independent investigation into the contributions of contemporary theory and research, and the review of emerging trends.

#### 533 Issues and Trends in Resource Specialist Services (3)

Prerequisite: Special Ed 528 and 529. A seminar dealing with current Resource Specialist Programs issues related to new legislation, judicial rulings, current research findings, emerging trends, and professional development.

#### 586 Curriculum Issues in Special Ed (3)

Prerequisite: admission to graduate status and permission of the instructor. The philosophical, social, economic, and educational issues which underly decision-making with respect to curriculum and methods selection in special education.

#### 597 Project (1-3)

Prerequisite: consent of instructor. Individual research on an empirical project, with conferences with the instructor, culminating in a project.

#### 598 Thesis (1-3)

Prerequisite: consent of instructor. Individual research with conferences with the instructor, culminating in a thesis.

#### 599 Independent Graduate Research (1-3)

Prerequisite: consent of instructor. Independent inquiry. For qualified graduate students.

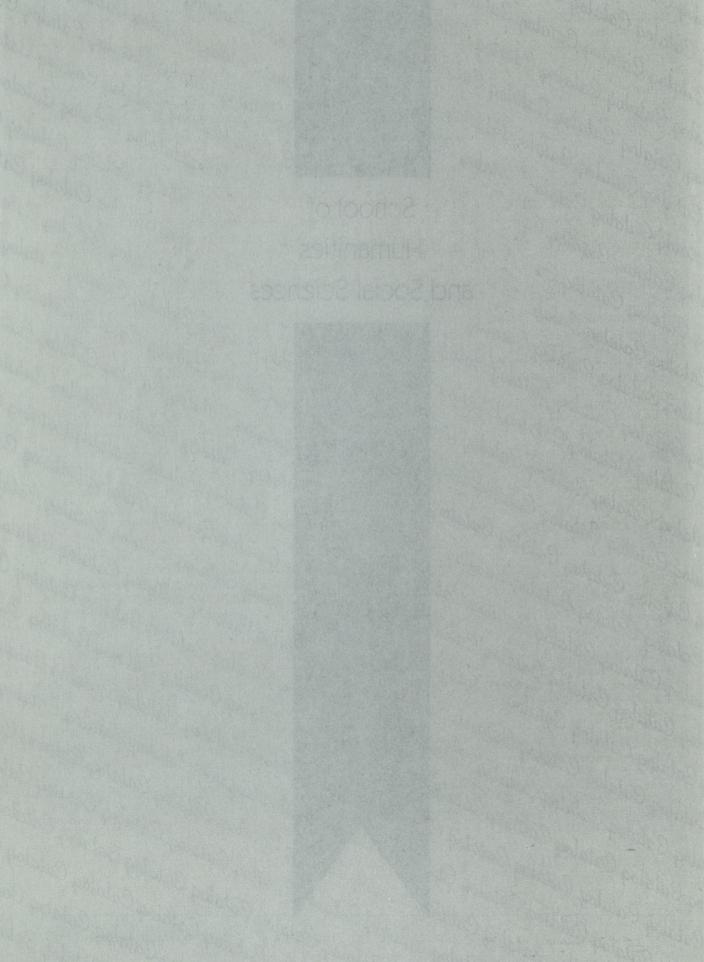
- 489A Directed Jeaching in Special Education (A) (c)
  Trerequisite Special Ed 371, 421, 461, 461, 461, 481A and Department, approval. Directed teaching in department actions of Learning Hand capped placement to most California Advanced Specialist, Credential requirements. Students must achieve a minimum of 60% success on specialed comprehences within assigned field site and settings. Must be taken credition credit.
- 489B Directed Teaching in Special Education (II) (6)
  Prerequisite, Special Ed 171, 421, 462, 464, 461, 463, 464, 464
  Department approval. Directed reaching in department approved Severely Functed reaching in detection and vanced Specialist Cardential requirements. Students must achieve a minimum of 60% success on specified connecencies within assigned field fire and seminars. Must be rate a credit no credit.
- Prerequisites opecial to 3/1 or Special to 4/0 and consent of Department Chair, Supervised processing the 4/0 and consent of Department Chair, Supervised processing to the completion of surveyors or sure-approved endoscements or certificates. May be repeated for credit Must be calcustements or certificates. May be repeated for credit.
- 496 Senior Educational Practicum (1-3)

  Conduct at an advanced level an educational practicum with educationally handicarped children.
- 499 Independent Study (1-3)
  Prerequisites senior or creditate startling and consent of metrues ton Individual studies under the direction of recults members Experimental, library, or creators projects.
  - 510 Research Design and Analysis (3) (Same as Ed Sec, 510)
- 520 Seminar in Measurement: Atypical Children (3)
  Prerequisite: Special Ed (8) or equivalent. Principle of measurement and the evaluation of avenual crildren. Areas covered teacher design tests frommed tests at the experient children and using test for instructional planning.
- 522 Behavior Problems in the Classroom (3)
  Prerequisite: Special Ed 371 or consent of instructor identification and management of social and affective distributes related
  to school performance. Early detection, behavior at modification
  techniques, parent counseling, interagency coop thron-
- 528 Resource Specialist Semmar: Curriculum, Assessment and Management (3)
- Prerequisites: Special Ed (53 and 46). Designed to prepare searchers to perform the coordinate of case of resource specialists. Focus is on curriculatin, legal requirements of resource succeiters programs coordination functions and skills, and direct course to cachers and students.

- 529 Resource Specialist Seminara Consulting and Paservici, Skills (3)
- Prerequisites: Special Ed 465 and 464. To prepare reachers to perform consultation and staff development tasks required of rescurie specialists. Focus, collaborative consultation with other reachers, content and format for inservice according, skills needed when working with decision-making groups.
- 530 Graduate Seminar on Gitredness and Greenview (5)

  Frerequisite: Special Ed 465 or consent of inscrutter van examination of varieties of higher cognitive functioning and those
  characteristics or performances described as creativity, rocus on
  ways to enhance skills in analysis, switchesis, contamion recaute
  problem solving and divergent productions.
  - 531 Exceptionality: Semmar in Developmental
- Prerequisite: Special Ed 463 or 464 or concern of insureror. Analysis of selected publication the field of devalopment dissipations with major emphasis upon independ of investigation into contemporary theoretical and research contribution.
- 532. Learning Dealifities Saminar (3)
  Prerequisite or equit 63 or equit teat and outsett of frattue for sanalysis of selection moderns in the first olderuning desirable aries with major emphases on in Jepende or investigation and the recombustions of conventionary theory and research, and the review of americing trends.
- 533 Issues and Trends in Percurus Specialist Strones (3)
  Recogniste: Special Ed 128 and 529: A seminal desting with
  durant Resonant Specialist Program's issues a lated to new legis
  lation, judicial rubings, current research frontings, emerging
  trends, and professional development.
- 586 Curriculum Issues in Special Ed (3)
  Perceptistes admession to graduate warms and permission of the instructor. The philosophical social, economic, and educational issues which underly decision making with respect to curriculum and methods selection in special educators. The gray prays
- 597 Project (1-3)
  Presequish Consent of Instrucer in gradient research on an
  empirical model, with consenses with the instructor, culmimatting of a project.
- 598. Thesis (1-3) with each of the constraint which of 3000. Proventially contain a interest with the analyse of infinitely containing or of thesis.
- 599 Independent Graduate Research (1/3)
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# School of Humanities and Social Sciences

Acting Dean: Chris Cozby
Associate Dean: Thomas Klammer
Associate Dean, Student Academic Affairs:
Leon Gilbert
Assistant Dean, Student Affairs:
John Hernandez

The School of Humanities and Social Sciences is composed of 15 departments, 8 cross-disciplinary programs and 5 special study centers. These units offer programs of study leading to 28 different minors, bachelor's degrees in 21 disciplines, 2 post-baccalaureate certificates, and master's degrees in 18 areas.

Some of these programs represent traditional areas of intellectual inquiry, others focus on emerging topics of study, and still others are professionally oriented. The common elements that unite these very different programs are recognition of the importance of traditional scholarship, the values reflected by it, social responsibility, free and critical inquiry, empirical analysis, and the development of leadership. Together these common elements prepare students for intellectually rewarding lives, responsible citizenship, and a wide variety of possible careers by developing critical thinking, clear writing, problem solving skills, and heightened understanding of the human condition.

#### Student Advisement and General Information

Academic advisement is provided by each of the departments and programs within the school. In addition, the school maintains an academic advisement office in McCarthy Hall 103 to serve students who have declared Humanities and Social Sciences as their school of interest, and to provide general coordination of advisement within the school.

Numerous academic student organizations within the School of Humanities and Social Sciences provide opportunities for students to develop and practice leadership. Co-curricular learning experiences are facilitated and coordinated through the Assistant Dean for Student Affairs.

Programs Offered

Afro-Ethnic Studies

(Option in B.A. Ethnic Studies, Minor)

American Studies (M.A., B.A., Minor)

Anthropology (M.A., B.A., Minor)

Chicano Studies

(Option in B.A. Ethnic Studies, Minor)

Christian Studies (Minor)

Comparative Literature (M.A., B.A.)

Conservation (Minor)

Criminal Justice (B.A., Minor)

English (M.A., B.A., Minor)

Environmental Studies (M.S.)

Ethnic Studies, (B.A.)

French (M.A., B.A., Minor)

Geography (M.A., B.A., Minor)

German (M.A., B.A., Minor)

Gerontology (Minor, Certificate)

History (M.A., B.A., Minor)

International Politics (Minor)

Japanese (B.A., Minor)

Jewish Studies (Minor)

Latin American Studies (B.A., Minor)

Liberal Studies (B.A.)

Linguistics (M.A., B.A., Minor)

Pacific Rim Studies (Minor)

Peace Studies (Minor)

Philosophy (B.A., Minor)

Political Science (M.A., B.A., Minor)

Portuguese (Minor)

Psychology (M.A., M.S., B.A., Minor)

Public Administration (M.P.A., Concentration in B.A.

Political Science, Minor)

Religious Studies (B.A., Minor)

Russian and East European Area Studies (B.A.)

Secondary School Teaching Emphasis in Language Arts Area

(Single Subject Waiver Program)

Social Sciences (M.A.)

Sociology (M.A., B.A., Minor)

Spanish (M.A., B.A., Minor)

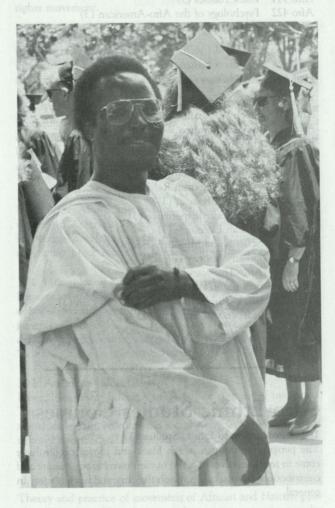
Teachers of English as a Second Language (Certificate)

Teaching English to Speakers of Other Languages-TESOL

(Concentration in M.S. Education)

Women's Studies (Minor)

## Department of Afro-Ethnic Studies



liberties and property rights; (Same as Political fe) paintional

Department Chair: J. Owens Smith Joseph and Con A Department Office: Education Classroom 475

Programs Offered

Bachelor of Arts in Ethnic Studies

Option in Afro-Ethnic Studies

Minor in Afro-Ethnic Studies

Wacira Gethaiga, Carl Jackson, J. Owens Smith, Billy Vaughn

Adviser

All programs: Wacira Gethaiga

#### INTRODUCTION

Afro-Ethnic Studies is a multidisciplinary approach to understanding the black experience as it relates to life in America as part of a world community. In addition to degree programs in Afro-Ethnic Studies, the department provides course work in Ethnic Studies in general (e.g. Intercultural Socialization) and other specific ethnic groups (e.g. American Indian).

The required minimum for the Bachelor of Arts in Afro-Ethnic Studies consists of 36 units: 101 or 107, 190, 280 and a minimum of 24 units in upper-division courses as follows.

Students majoring in the Afro-Ethnic Studies program have a special preparation in and sensitivity to life in America as a part of a world community. The program is multi-disciplinary in nature in that all aspects of Afro Ethnic Studies affect and are affected by other programs.

Graduates from the Afro-Ethnic Studies program have gone into careers in teaching, community development, community leadership, social work, urban research, law, civil service, industrial relations and a variety of comparable fields. Many have gone into graduate work in this field and some have entered more traditional disciplines where a general knowledge of social sciences and humanities is a prerequisite.

#### BACHELOR OF ARTS IN ETHNIC STUDIES OPTION IN AFRO-ETHNIC STUDIES

Lower Division Courses (12 units required)

Core Courses (9 units required)

Afro 101 Introduction to Ethnic Studies (3)

or Afro 107 Introduction to Afro-American Studies (3)

Afro 190 Survey of American History with Emphasis on Ethnic Minorities (3)

Afro 280 Afro-American History (3)

Elective (3 units required)

Afro 220 The Indian in American History (3)

#### Upper Division Courses (24 units required)

Social Science Courses (12 units required)

Afro 309 The Black Family (3)

Intracultural Socialization Patterns (3) Afro 311

Afro 317 Black Politics (3)

Afro 422 Psychology of the Afro-American (3)

#### Humanities Core Courses (6 units required)

Afro 301 Afro-American Culture (3)

Afro 424 Afro-American Literature (3)

#### Electives (6 units required)

Afro 310 Black Women in America (3)

Afro 312 American Indian Women (3)

Afro 314 Pan-African Dance & Movement (3)

Afro 320 Black American Intellectual Thought (3)

Afro 321 Minority Community Development Planning (3)

Afro 325 African-American Religion (3)

Afro 335 History of Racism (3)

Afro 346 The African Experience (3)

Afro 381 African Literature (3)

Afro 385 Schools and Minority Groups (3)

Afro 402 Urban Minority Politics (3)

Afro 403 Oral History of Ethnic America (3)

Afro 430 A Social Psychological Study in Ethnic Minority Behavior (3)

Afro 437 American Indian Religions and Philosophy (3)

Afro 460 Afro-Amer Music Appreciation (3)

Afro 463 Seminar in Black Music (3)

Afro 483 Black Child and the Education System (3)

Afro 499 Independent Study (1-3)

#### MINOR IN AFRO-ETHNIC STUDIES

Students interested in the Afro-Ethnic Studies minor are required to take a minimum of 21 units. This includes nine units of lower-division courses and twelve units of upper-division courses.

#### Lower Division Courses (9 units)

Core Courses (6 units)

Afro 101 Introduction to Ethnic Studies (3)

or Afro 107 Introduction to Afro-American Studies (3)

Afro 190 Survey of American History with Emphasis on Ethnic Minorities (3)

Elective (3 units)

Afro 220 The Indian in American History (3)

#### Upper Division Courses (12 units)

Social Sciences (6 units)

Afro 309 The Black Family (3)

Afro 311 Intracultural Socialization Patterns (3)

Afro 317 Black Politics (3)

Afro 422 Psychology of the Afro-American (3)

Afro 430 A Social Psychological Study in Ethnic Minority Behavior (3)

#### Humanities and Electives (6 units)

Afro 301 Afro-American Culture (3)

Afro 310 Black Women in America (3)

Afro 312 American Indian Women (3)

Afro 314 Pan-African Dance & Movement (3)

Afro 320 Black American Intellectual Thought (3)

Afro 321 Minority Community Development Planning (3)

Afro 325 African-American Religion (3)

Afro 335 History of Racism (3)

Afro 346 The African Experience (3)

Afro 381 African Literature (3)

Afro 385 Schools and Minority Groups (3)

Afro 402 Urban Minority Politics (3)

Afro 424 Afro-American Literature (3)

Afro 463 Seminar in Black Music (3)

Afro 483 Black Child and the Education System (3)

Afro 499 Independent Studies (1-3)

## Afro-Ethnic Studies Courses

#### 101 Introduction to Ethnic Studies (3)

The perspective through which black and brown people have come to see themselves in terms of their own heroes, culture and contributions to societies in which they live and world society in general.

#### 107 Introduction to Afro-American Studies (3)

The aims and objectives of Afro-American studies. The basic terms and references that give substance to Afro-American studies.

#### 190 Survey of American History with Emphasis on Ethnic Minorities (3)

(Same as History 190 and Chicano Studies 190)

#### 220 The Indian in American History (3)

A chronological study of the history of the American Indian people and their struggle for survival from the pre-European era to present.

## 280 Afro-American History (3)

A survey of the social, economic, political, cultural history of black Americans from African origins to present. Among the topics will be the history of slavery, the development of racism, accommodation and protest, black nationalism and the civil rights movement.

#### 301 Afro-American Culture (3)

Prerequisites: Afro-Ethnic Studies 101 or 107 or 190 or consent of instructor. African cultural characteristics in the New World and contemporary events, including art, ideas, dance and literature.

#### 309 The Black Family (3)

Prerequisites: Afro-Ethnic Studies 101 or 107 or 190 or consent of instructor. The American social conditions that shaped the black family from the African cultural patterns to the family that exists today. The roles of poverty, racism and discrimination.

#### 310 Black Women in America (3)

Prerequisite: Afro-Ethnic Studies 190. Issues in the study of black women in America, including social, political, economic and intellectual development. Historical and contemporary issues as they affect black American women will be investigated.

#### 311 Intracultural Socialization Patterns (3)

Patterns of role learning as they vary within subpopulations; changes over time in the values, attitudes, and goals of both the general culture and of subcultures; stereotypes and realities; understanding and dealing with cultural variation as well as cultural "norms." (Same as Human Services 311)

#### 312 American Indian Women (3)

Prerequisite: Afro-Ethnic Studies 101 or consent of instructor. The female role in American Indian tribal lifestyles. Labor divisions, leadership, political and social activities from a number of tribes. Historical and contemporary issues, as they affect American Indian women.

#### 314 Pan-African Dance and Movement (3)

Theory and practice of movement of African and Haitian peoples. Movement (dance) as quasi-language in perpetuating the life style of African cultures and cultures of African descent.

#### 317 Black Politics (3)

Prerequisite: Poli Sci 100 and Afro-Ethnic Studies 107 or consent of instructor. Blacks' struggle for political equality and relief from political oppression. Public policies concerning blacks' freedoms, liberties and property rights. (Same as Political Science 317)

#### 320 Black American Intellectual Thought (3)

Prerequisite: Afro-Ethnic Studies 190. A study of the black American intellectual from slavery to contemporary times, with special emphasis on black contributions to American political and social thought as well as their contributions in America's social development.

#### 321 Minority Community Development Planning (3)

Prerequisites: Afro-Ethnic Studies 317 or permission of instructor. This course is an interdisciplinary approach to the study of political and economic development in minority communities. Emphasis is placed on conceptualizing problems and planning and designing problem-solving models to resolve them.

#### 325 African-American Religion (3)

Prerequisites: Afro-Ethnic Studies 190 or consent of instructor. African-American belief systems and denominations. A study of folk beliefs among Blacks, African-American religious groups, and the role of the Black Church in politics and social change in the Black community. (Same as Religious Studies 325)

#### 335 History of Racism (3)

An investigation into the historical roots and current expressions of racism. Course focuses on how racism manifests itself through individual, social, political, economic and religious institutions and proposes methods of combating it.

#### 346 The African Experience (3)

Prerequisite: Upper division standing. African history from the origin of the black man and traditional African civilization through the African diaspora to the institutional realities of Africa today. Not available for credit to students who have completed History 355.

#### 381 African Literature (3) (Formerly 352)

(Same as English 381 and Comparative Literature 381)

#### 385 Schools and Minority Groups (3)

Prerequisites: Child Development 312 or consent of instructor. Focuses on the ways in which the constraints of formal schooling affect the behaviors and attitudes of ethnic minority group members. Emphasizes the role of the community and family in school readiness and the psychological consequences of schooling.

#### 402 Urban Minority Politics (3)

(Same as Poli Sci 402 and Chicano 402)

#### 403 Oral History of Ethnic America (3)

Prerequisite: Afro-Ethnic Studies 190. Theoretical and practical study of oral history focusing on the experiences of American ethnic groups. Examines oral history through the study of oral sources emphasizing traditions, culture and institutions of various ethnic groups.

#### 422 Psychology of the Afro-American (3)

Black identity and the life styles that have risen from racism. The socioeconomic, political, cultural conditions which have fostered the blackness concept and the psychological devices used by blacks to survive.

#### 424 Afro-American Literature (3) (Formerly 410)

Prerequisites: Afro-Ethnic Studies 107 or English 101 or consent of instructor. The literary contributions by major black American authors. Contemporary black writers and the recurring themes of protest and quest for identity. (Same as English 424.)

## 430 A Social Psychological Study in

Ethnic Minority Behavior (3)

Prerequisites: Afro-Ethnic Studies 101 or 107 or consent of instructor. The social psychological problems that ethnic minorities face such as stress-related problems in mental health. Society's reactions to these problems among these groups.

#### 437 American Indian Religions and Philosophy (3)

Prerequisite: Afro-Ethnic Studies 220 or 311 or consent of instructor. Examination of American Indian religious and philosophic perspectives. Survey of religious interpretations and thought in various facets of belief ranging from traditional Indian religion to Christianity. Contemporary religious activities will be highlighted. (Same as Religious Studies 437)

#### 460 Afro-American Music Appreciation (3)

Prerequisites: Afro-Ethnic Studies 107 or 190 or consent of instructor. Black music in America; the sociological conditions that help produce various forms of black music.

#### 463 Seminar in Black Music (3)

Prerequisite: upper-division standing or consent of instructor. Indepth appreciation of Black American musical performance practices and musical styles such as Spirituals, Ragtime, Blues, Jazz, Gospel, and Rhythm & Blues through lecture, discussion, and demonstration. (Same as Music 463)

#### 483 Black Child and the Education System (3)

Prerequisite: Afro-Ethnic Studies 385. The impact of the American Educational System upon the Black child from 1896 to the present.

#### 499 Independent Study (1-3)

Prerequisites: senior level and acceptance of the subject by department chair and instructor directing the study.

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# Department of American Studies

Department Chair: Wayne Hobson

Department Chair: Wayne Flooson
Department Office: Education Classroom 622

Programs Offered

Bachelor of Arts in American Studies

Minor in American Studies

Master of Arts in American Studies

#### Faculty

Allan Axelrad, Jesse Battan, Wayne Hobson, John Ibson, Karen Lystra, Terri Snyder, Michael Steiner, Pamela Steinle, Leila Zenderland

Advisers oriminal justice, English, history, ge srasivbA Undergraduate: All full-time faculty within the department Graduate: Michael Steiner

#### INTRODUCTION

American studies gives students a thorough understanding of the past and present nature of American civilization. Three central features of our approach are: (1) an emphasis on the analysis of culture — that shared system of beliefs, behaviors, symbols, and material objects through which Americans give meaning to their lives; (2) examination of the interplay between a dominant culture and the many subcultures in America; and (3) an interdisciplinary perspective that uses both the social sciences and humanities.

Besides providing a rich liberal arts education, training in the major develops skills in writing and analysis and strengthens the ability to recognize connections among complex materials and diverse phenomena. American studies graduates obtain careers in business, communications, government service, law, social services, and teaching. The major is also a fine background for graduate work in the field or in related fields.

#### Teacher Credential

American studies participates in the Ryan Act teacher credential program with course work for secondary school waivers in the social sciences and history, and with course work for the elementary school multiple subject waiver. Because American studies is interdisciplinary, the major provides a particularly fine background for elementary school teaching and for secondary school teaching in the social sciences.

#### David Jon Vaca Memorial Scholarship

A maximum of \$500 per semester is awarded to an undergraduate major in American studies based on need and academic achievement.

#### BACHELOR OF ARTS IN AMERICAN STUDIES

The major consists of 36 units: 12 units in the core program and 24 units of electives following either Plan A or B.

#### Core Program (12 units required of all majors)

- Introduction to American Studies (3)
- 301 The American Character (3)
- 350 Seminar in Theory and Method of American Studies (3)
- 401 Proseminar in American Studies (3)

#### Electives (24 upper-division units)

Elective course work is approved by the major adviser following either Plan A or B:

- A. Work in American studies and one or two other fields such as Afro-ethnic studies, anthropology, Chicano studies, communications, criminal justice, English, history, geography, political science, psychology or sociology.
- B. Course work pursuing a particular theme or subject, such as: law and society, sex roles, the visual arts, ethnicity, urbanization, the child and the family, or popular culture.

#### MINOR IN AMERICAN STUDIES

The minor in American studies requires 21 units: American Studies 201, 301 or 345, and 401, plus 12 units of electives. Six units may be lower division and three units may be taken in a related department upon approval of an American Studies Department adviser.

#### MASTER OF ARTS IN AMERICAN STUDIES

The degree is for qualified students in the arts, humanities and social sciences who are interested in an interdisciplinary approach to American society and culture. The program puts a general emphasis on the processes of social and cultural change. The interdisciplinary form of training, with a focus on a unified approach to American materials, seeks to provide a full vision of our complex pluralistic culture. Particular areas of faculty concentration within the program include: popular culture, folk culture, ethnicity, regionalism, film-art-architecture, Puritanism, Victorianism, sexuality and American culture, and American cultural radicalism, though the student is encouraged to draw upon the knowledge and expertise available in any relevant area of the arts, humanities and social sciences.

#### Admission to Graduate Standing: Conditionally Classified

A student must meet the all-university requirements for admission. (Please consult the appropriate section of this catalog for complete information.) In addition, a student must (1) hold a bachelor's degree with a major, or its equivalent, in American studies or in an appropriate discipline of the humanities or social sciences, (2) have a grade-point-average of at least 3.0 in upperdivision major courses, and (3) submit two satisfactory letters of recommendation from instructors in upper-division major

Students whose undergraduate program indicates certain limited subject, grade, or breadth deficiencies may be considered for admission, at the discretion of the graduate adviser, with approval of the department's graduate committee. In such cases, a student must make up deficiencies, in consultation with the graduate adviser, and must complete all required courses with at least a B average before classified graduate standing may be considered.

#### Graduate Standing: Classified

Students will be classified upon fulfillment of the above prerequisites, and after development of an approved study plan.

#### Study Plan

The program requires 30 units of graduate study: 21 units in the discipline of American studies, 6 units in other disciplines, and 3 units in development of an appropriate research skill.

American Studies (21 units)

A. Required courses

American Studies 501 Theory and Methods (3) American Studies 502 Seminar: Selected Topics (3) (May be repeated for credit with different topic)

#### B. Electives

Additional upper-division or graduate level course work in American studies (12)

Choose either C. or D. as follows:

- C. American Studies 598 Thesis (3) Should be taken in the semester immediately preceding graduation from the program.
- D. An additional American studies graduate level elective, i.e., American Studies 599, American Studies 502T, or American Studies 503 plus successful completion of a three-part take home comprehensive examination based on the department's core reading list.

Other Disciplines (6 units)

Graduate-level seminars in anthropology, art, communications, comparative literature, English, geography, history, political science, or sociology.

#### Elective Skill (3 units) which to espand school A mastrom A 884

A student must demonstrate proficiency in a methodological skill appropriate to his or her scholarly interests. In consultation with an adviser, the student will select the skill to be developed. Proficiency in a foreign language, quantitative methods or linguistics would, for example, be appropriate. If prerequisite work is necessary before a student can develop proficiency through three units of course work, that preliminary work will not be counted toward the 30 units required for the M.A. degree.

For further information, consult graduate program adviser.

# American Studies Courses

#### 101 Introduction to American Culture Studies (3)

The concepts of interdisciplinary culture studies, focusing on analysis of cultural change in complex, literate society. American culture, including cross-cultural comparisons. Topics include popular culture, subcultures, regionalism, myths and symbols, and culture and personality.

#### 201 Introduction to American Studies (3)

With the concept of culture as a unifying principle, focus is on four separate time periods in order to provide the framework for an understanding of American civilization. Several different kinds of documents will be used to illustrate the nature and advantages of an interdisciplinary approach.

#### 300 Introduction to American Popular Culture (3)

An historical exploration of popular culture in America as it both reflects and contributes to the search for meaning in everyday life. Themes include heroes, myths of success, symbols of power, images of romance, consumerism, race and sexual identity.

#### 301 The American Character (3)

Cultural environment and personality. The extent to which there have been and continue to be distinctly American patterns of belief and behavior. Similarities, as well as class, ethnic, sex and regional differences among Americans.

#### 318 Hollywood and America:

### Using Film as a Cultural Document (3)

An examination of Hollywood as a cultural institution. Concentrating on the films of selected periods, analyzes Hollywood's ability to create and transmit symbols and myths, and legitimize new values and patterns of behavior.

#### 345 The American Dream (3)

An interdisciplinary analysis, in settings both historical and contemporary, of the myth and reality surrounding the notion of America as a land of unparalleled and unlimited possibilities, especially in the achievement of personal material success.

#### 346 American Culture Through Spectator Sports (3)

Study of the shifting meaning of organized sports in changing American society. Includes analysis of sports rituals, symbols and heroes. Focus is on the cultural significance of amateur and professional football, baseball and basketball.

#### 350 Seminar in Theory & Method of American Studies (3)

Prerequisites: American Studies 201 and 301; or consent of instructor. To provide an understanding and appreciation of methodology, theories of society and images of man as they affect American studies contributions to scholarship. Fulfills the course requirement of the university upper-division baccalaureate writing requirement for American studies majors.

#### 377 Prejudice and American Culture (3)

Prerequisite: upper-division standing. Concepts and methods of American culture studies as tools for better understanding the origins and appeal of intolerance, past and present. Particular focus on racism, ethnic and religious bias, sexism, and homopho-

#### 401T Proseminar in American Studies (3)

Prerequisites: American Studies 201 and 301; or consent of instructor. The relationship between theory and application. Analytic readings and research. Check the class schedule for topics being considered. May be repeated for credit.

### 402 Religion and American Culture (3)

Prerequisite: Upper division standing. An interdisciplinary analysis of the religious dimensions of American core culture from colonial settlement to the present. Topics include: Puritanism; rationalization, secularization and feminization; the conversion experience, revivalism and revitalization; fundamentalism and modernism; and civil religion.

#### 405 Images of Crime & Violence in American Culture (3)

Prerequisite: American Studies 201 or completion of general education section on American history, institutions and values. Cultural analysis of meanings ascribed to law and order, authority, violence and punishment in the American past and present. Examined in selected symbols, images, traditions, and realities.

#### 407 American Humor (3) (Formerly 393)

Prerequisite: American Studies 201 or completion of general education section on American history, institutions and values. Analyzes the cultural significance of various types of American humor in past and present settings. How humor reinforces existing culture and also serves as an index and agent of cultural change. Humor's relationship to ethnicity, region, social class and sex.

#### 409T America in Cross-Cultural Perspective (3) (Formerly 390)

Prerequisites: American Studies 201 or completion of general education section on American history, institutions and values. Compares selected features of American cultural life with those of another national culture. Attention given to comparative historical development as well as to contemporary comparisons. See class schedule for specific topic. May be repeated for credit with a different topic.

#### 411 The White Ethnic in America (3)

Past and present cultures of America's white ethnic groups, principally non-Anglo-Saxon people such as the Jews, Irish and Italians. Ethnic stereotypes, the survival, repression and loss of eth-

#### 413 The Shifting Role & Image of the American Male (3)

The effect of economic, social, political and cultural changes on American males. Emphasis on the 19th and 20th centuries.

#### 416 Southern California Culture:

A Study of American Regionalism (3)

Regionalism as a concept and as a fact of American life. Theories of regionalism measured against a study of Southern California and one other distinct American region.

#### 419 Love in America (3)

Prerequisites: Upper-division standing or consent of instructor. Examines changes in the emotional lives of American men and women from the 17th century to the present. Concentrates on enduring and innovative views on the nature of love and the cultural forces that shape its legitimate and illegitimate expression.

#### 420 Childhood and Family in American Culture (3)

Historical and contemporary culture study of childhood and family in America. The idea of childhood, changing concepts of child-rearing, growing up in the American past, the impact of modernization, mother and home as dominant cultural symbols.

#### 423 The Search for Community (3)

Prerequisite: Upper-division standing. Examining the historical transformation and modern reformulation of community in America, the course emphasizes the relationship of the individual to the larger social group. Topics include: freedom, need to belong, alienation, and search for identity.

#### 433 Visual Arts in Contemporary America (3) (Formerly 333)

Prerequisite: American Studies 201 or completion of general education section on American history, institutions and values. Visual phenomena in America as they reveal changes in recent American culture. Areas covered include the "high" arts (painting, sculpture) as contrasted with the "low" arts (advertising, television); the artist as innovator, alienation, the business world, and American values in art.

#### 438 American Minds: Images of Sickness and Health (3)

Prerequisite: upper-division standing. Historically explores cultural changes in American images of the healthy mind. Topics include medical and legal views of insanity, Freud's impact on American thought, literary treatments of madness, and psychological themes in American popular culture.

#### 440 American Folk Culture (3)

Prerequisite: upper-division standing or consent of instructor. Considers American culture from the perspectives of particular folk groups and through the eyes of the "common" person, past and present. Topics include: interpretation of artifacts and oral traditions; relationships between regional, ethnic and folk identity; modernization and folk consciousness.

#### 442 Television and American Culture (3)

Prerequisite: Completion of the general education section of American history, institutions and values. American television as an interactive form of cultural expression, both product and producer of cultural knowledge. Examines the structure and content of television genres, and social-historical context of television's development and use, audience response, habits and environments of viewing.

#### 444 The Built Environment (3)

Prerequisites: Upper-division standing or consent of instructor. Examines how Americans have shaped and structured space from the seventeenth century to the present. Emphasizes the relationship between space, place, architecture, and material culture; the interpretation of cultural landscapes and architectural styles; the changing meanings of the American home.

#### 449 The American West in Symbol and Myth (3) (Formerly 395)

Prerequisite: American Studies 201 or completion of general education section on American history, institutions and values. The meaning of the West to American culture through analysis of cultural documents such as explorer and captivity narratives, fiction, art and film. Topics include: perception of wilderness, Indians, frontiersmen and role of West in creating a sexist national mythology.

#### 450 Women in American Society (3)

Socio-cultural history of women and women's movements in American society. Emphasis on 19th and 20th centuries. Examination of cultural models of American womanhood - maternal, domestic, sexual, social - their development and recent changes.

#### 460 Cultural Radicalism in America (3) (Formerly 360)

Prerequisite: American Studies 201 or completion of the general education section on American history, institutions and values. The designs and strategies for cultural transformation of selected radical groups and individuals from the Puritans to the present.

#### 465 The Culture of the American South (3) (Formerly 365)

Prerequisite: American Studies 201 or completion of the general education section on American history, institutions and values. Examines distinctive cultural patterns in the American South. past and present. Topics include: Southern concepts of work and leisure, race and gender roles, political and religious controversies, literature and folklore, and the South as portrayed in the media.

#### 468 Culture in Turmoil: 1960s America (3)

Prerequisite: Upper-division standing. Origins, manifestations, and continuing significance of the turbulence in American culture associated with the 1960s. Accelerated changes which occurred (or seemed to occur) in cultural meanings of authority, achievement, patriotism, sexuality, technology, and consciousness.

#### 498A American Social History 1750-1860 (3) (Formerly 386A)

(Same as History 489A)

#### 498B American Social History 1865-1930 (3) (Formerly 386B)

(Same as History 489B)

#### 499 Independent Study (1-3)

Supervised research projects in American studies to be taken with the consent of instructor and department chair. May be repeated for credit.

#### 501 Theory and Methods (3)

The American Studies movement. Its conceptual and methodological development. The way this development was affected by and in turn reflected larger trends in the culture itself.

#### 502T Seminar: Selected Topics (3)

A particular problem or topic as a case study in the use of interdisciplinary methods in American studies. May be repeated for Anthropology Museum Philametrics 313 7 Cologordina

#### 503 Classics in American Studies (3)

Prerequisites: American Studies 501 or consent of instructor. Critical examination of texts that have been important or influential in the development of American Studies.

598 Thesis (3) pologondinA ni sirA lo reiseM Prerequisite: graduate standing in American studies and consent of graduate coordinator. The writing of a thesis based on original research and its analysis and evaluation.

### 599 Independent Graduate Research (1-3)

Prerequisite: graduate standing in American studies and consent of graduate coordinator. May be repeated for credit.

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# Department of Anthropology

Department Chair: Jacob Pandian Department Office: Humanities 420-A Anthropology Museum: Humanities 313 Archaeological Research Facility: Humanities 313

Programs Offered Bachelor of Arts in Anthropology Minor in Anthropology Master of Arts in Anthropology

#### Faculty

Roger Joseph, LeRoy Joesink-Mandeville, Joseph Nevadomsky, Jacob Pandian, Susan Parman, Marlene Rios, Otto Sadovszky, Richard See, Judy Suchey, Corinne Wood

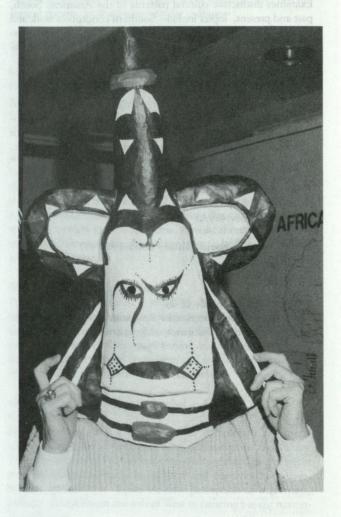
#### Advisers

Undergraduate: Jacob Pandian Graduate: Jacob Pandian

#### INTRODUCTION

Anthropology is the scientific study of humankind from its beginnings millions of years ago to the present day. Nothing human is alien to anthropology. Of the many sciences which study certain aspects of our species, only anthropology attempts to understand the whole panorama, in time and space, of the human condition. While other academic disciplines may concentrate on one aspect of human experience, anthropology is an integrated study of the whole range of human activities, including communication and language, economics, political organization, religion, the arts, philosophy, education, medical and nutritional practices, social interaction, marriage, child rearing, science, and technology. Anthropology enables the study of people from all over the world as they live now, as they lived in the prehistoric and historic past, and as they may live in the future. Anthropology also studies people as biological-psychological-cultural-social wholes living in relationship with their environment; a major goal is to understand human beings from this overall perspective.

The major in Anthropology offers five concentrations and is designed to prepare students for advanced degrees in Anthropology as well as for positions in the private and public sector. Social service occupations, work in urban centers, museum work, health professions, natural resources management, and overseas work are some of the areas that offer many opportunities for anthropology graduates.



BACHELO	R OF ARTS IN ANTHROPOLOGY	Anthro 324B The Aztecs and Their Predecessors (3)
Core Courses (18 units)		Anthro 325 Peoples of South America (3)
Anthro 101		Anthro 327 Origins of Civilization (3)
Anthro 102	Introduction to Cultural Anthropology (3)	Anthro 328 Peoples of Africa (3)
Anthro 103	Introduction to Archaeology (3)	Anthro 329 Peoples of Caribbean (3)
Anthro 300	Language and Culture (3)	Anthro 340 Peoples of Asia (3)
Anthro 480	History of Anthropology (3)	Anthro 345 Peoples of Middle East and North Africa (3)
Anthro 481	Contemporary Anthropology (3)	Anthro 346 Archaeology of the Holy Land (3)
	,,	Anthro 347 Peoples of the Pacific (3)
Theory (9 u	inits)	Anthro 352 Peoples of Ancient Europe (3)
Students mu	st take at least three of the following courses:	Anthro 360 Contemporary Amer Culture (3)
octudents must take at least three of the following courses:		Anthro 370 Anthropology of Non-Western Films (3)
Anthro 305	Anthropology of Religion (3)	Anthro 490 Undergraduate Seminar in Anthropology (3)
Anthro 306	Comparative Aesthetics and Symbolism (3)	Anthro 491 Internship in Anthropology (3)
Anthro 409	Applied Anthropology (3)	Anthro 499 Independent Study (1-3)
Anthro 410	Urban Anthropology (3)	Note: Students may take three to nine elective units of coursework
Anthro 411	Culture and Communication (3)	from theory and methods categories if those units are not used to
Anthro 412	Culture Change (3)	meet the requirements of coursework theory or method. Also,
Anthro 413	Culture and Personality: Psychological	students may take three to nine units of coursework in related fields.
Anthropol	logy (3)	Courses in related fields must be selected in consultation with the
Anthro 414	Economic Anthropology (3)	adviser; no related field course will be counted toward the major
Anthro 415	Culture and Nutrition (3)	unless it has the approval of the adviser.
Anthro 417	Life Quests (3)	Alougothing noisy in 19day, to stinu is
Anthro 419	Shamanism in Cross-Cultural Perspective (3)	TOTAL — 45 units
Anthro 432	Women in Cross-Cultural Perspective (3)	OPTIONAL CONCENTRATIONS FOR B.A. IN TRAM
Anthro 440	Human Evolution (3)	ANTHROPOLOGY
Anthro 442	Medical Anthropology (3)	
Anthro 450	Culture and Education (3)	Students who opt for a concentration must take the specific
Anthro 460	Public Archaeology in California (3)	courses listed under the concentration. Those who opt for con-
Anthro 470	Survey of Anthropological Films (3)	centrations must see the program adviser, Dr. Jacob Pandian.
Methods (9	units) when Ram season of not nely there of f	Educational Anthropology Concentration
Students mus	st take at least three of the following courses:	And and a Conference of the viriable plant share of Units
		Anthropology Core Courses
	Cultural Analysis (3)	Theory: Anthro 409, 410, and 450
Anthro 401	Ethnographic Field Methods (3)	Method: Anthro 401 and 497
Anthro 402	Museum Science (3)	Electives: One area course and Anthro 411, 412, 413, 490, 491 or 499
Anthro 403	Archaeological Fieldwork (3)	Allulio 411, 412, 413, 450, 451 of 455
	Analytical Methods in Archaeology (3)	gardenesser religion; arrespentirecture, intelier fist view 245
Anthro 405	Human Osteology (3)	Medical Anthropology Concentration
Anthro 406	Descriptive Linguistics (3)	Anthonology Con Courses 120
Anthro 407	Anthropological Video Production (3)	Anthropology Core Courses
Anthro 416	Anthropological Linguistics (3)	Theory: Anthro 409, 413, and 442
Anthro 441	Human Variation (3)	Method: Anthro 401 and 497
Anthro 476	Archaeological Investigations (3)	Electives: One area course and magnitude at noise in A. (semb
Anthro 497	Ethnographic Investigations (3)	Anthro 415, 440, 491 or 4999
Anthro 498	Museum Practicum (1-3)	45 partment questionnaire, letter of utent, transcripts, and at

Electives (9 units)

Tradition (3)

Anthro 100 Non-Western Cultures and The Western

Anthro 104 Traditional Cultures of the World (3)

Anthro 320 Cultures of Europe (3)

Anthro 321 The American Indian (3) Anthro 324A The Ancient Maya (3) Museum Anthropology Concentration

Method: Anthro 402, 404 and 498 ...... 9

Electives: One area course and a specific medical and

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#### Urban Anthropology Concentration

(c) summer topic (c) summer topic (c) ordered
Anthropology Core Courses
Theory: Anthro 409, 410 and 412 9
Method: Anthro 401 and 497 9
Electives: One area course and Anthro 490, 491 or 499
5 June Students may take three to pine electric units of somewor

45

#### MINOR IN ANTHROPOLOGY

Twenty-one units must be taken. Anthropology 100 or 101 or 103; 102; 300 or 416; 480; and 481 are required; plus six additional units of upper-division anthropology.

#### MASTER OF ARTS IN ANTHROPOLOGY

The program offers advanced study of general anthropology, while simultaneously encouraging specialization in one (or more) of the traditional subdisciplines: archaeology, cultural anthropology, linguistics, and physical anthropology. Opportunities for field and laboratory research and for other related learning experiences permit students to enlarge upon formal classroom training and to work independently with original data. Students may pursue a thesis or project of either a traditional or more exploratory character. Efforts are made to assist individuals to plan programs that will meet their individual needs and interests.

#### Prerequisites

An applicant must meet the university requirements for conditionally classified graduate standing: a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see section of this catalog on admission of graduates for complete statement and procedures). Admission is contingent upon evaluation and acceptance by the Graduate Study Committee. The applicant must submit: department questionnaire, letter of intent, transcripts, and at least two letters of recommendation. Students with limited subject or grade deficiencies may be considered for admission to the program if they agree to complete additional courses selected by the Graduate Study Committee, with at least a 3.0 (B) average. Subject deficiencies must be met prior to candidacy. Students entering from other colleges and universities and/or from fields other than anthropology may discuss appropriate course substitutions with the Graduate Study Committee.

#### BACHELOR OF ARTS IN ANTHROPOLO noitsifical

Lower Division

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements, may be granted classified graduate standing upon the development of an approved study plan:

1. A bachelor's degree with a minimum of 27 units in anthropology, including the following courses or their equivalents.

Lower Division	Onus
Anthro 101, 102 and 103	9
Anthro 300 or 416, 480 and 481	9
Additional upper-division coursework in Anthropology	
Total	27

Reading courses and special examinations may be substituted for some of these prerequisites by the department.

- 2. A GPA of 3.0 (B) for all work taken in anthropology.
- 3. Classification review administered by the graduate adviser.

#### Study Plan

The study plan for the degree must include the following:

Citts
Anthro 501 Seminar: Methodology of Anthropological
Research
Anthro 502 Contemporary Theory in Anthropology 3
Anthro 597 Project (3,6)
Anthro 598 Thesis (3,6)
Two additional graduate seminars in anthropology 6
400-level or graduate work in anthropology 6
400-level or graduate work in anthropology or TOA OTHERA
related fields

1 Inite

Up to six units of Anthropology 599, Independent Graduate Research, may be used for requirement 5 and/or 6. For continuation in the program an average of 3.0 (B) for all work in the study plan must be maintained.

Students must remain continuously enrolled, either by enrolling in at least one anthropology course each semester or by enrolling in Graduate Studies 700. Students may request a waiver of this requirement for one or two semesters if professional purposes require absence from campus. A student who is not continuously enrolled will be required to apply for readmission to the program.

A thesis or a project, including an oral examination, must be completed for the degree. Normally a student will register for thesis or project two times, for three units each semester. Anthropology 501 and 502 must be taken within the first 1½ years of graduate work.

The progress of graduate students will be reviewed prior to classification and again before advancement to candidacy.

Students must demonstrate to their thesis committee that they have competence in a foreign language or quantitative methods by (1) translating a short text which is approved by the student's committee and focuses on the student's research field or (2) passing an anthropology course in quantitative methods or another course in quantitative methods approved by the student's committee.

For further information, consult the graduate program adviser. See also the Department of Anthropology's student handbook.

### Anthropology Courses

100 Non-Western Cultures and the Western Tradition (3) An examination of the changing views of man, nature and culture in Western civilization as related to the impact of non-Western influences, including the use and interpretation of data on non-Western peoples and cultures.

101 Introduction to Biological Anthropology (3)

Humans as biological organisms and in evolutionary perspective. Concepts, methods, findings and issues in the study of the order primates, including the relationships between fossil monkeys, apes and humans, and the significance of genetic diversity between modern populations. (CAN ANTH 2)

#### 102 Introduction to Cultural Anthropology (3)

The nature of culture and its significance. Uniformities and variations in human cultures. Cultural analyses of major institutional forms such as the family, economy, government, religion and art with an emphasis on preliterate peoples. Central problems of cultural comparison and interpretation. (CAN ANTH 4)

#### 103 Introduction to Archaeology (3)

Relationship of archaeology, culture history and culture process, field methods and analysis of archaeological data; the uses and abuses of archaeology. World culture history from Pleistocene beginnings to the threshold of civilization. (CAN ANTH 6)

#### 104 Traditional Cultures of the World (3)

A comparative, worldwide survey of traditional, selected and well-studied ways of life using ethnographic writings, novels and films. Examines representative bands, tribes, chiefdoms, primitive states and folk societies.

#### 150A Western Civilization to the 16th Century: A Comparative Approach (3) (Same as History 150A) (Same as History 150A)

#### 300 Language and Culture (3)

Prerequisite: Anthro 102 or consent of instructor. Language as a factor in culture. Trends in the study of language and culture.

#### 305 Anthropology of Religion (3)

Prerequisite: Anthro 102 or consent of instructor. Beliefs and practices in the full human variation of religious phenomena, with an emphasis on primitive religions. The forms, functions, structures, symbolism, and history and evolution of religious systems.

#### 306 Comparative Aesthetics and Symbolism (3)

The metaphysical and mystical systems underlying the "grammars" of the art, myths, and rituals of various nonliterate and literate peoples and their development into creative experiences.

345 Archaeology of the Holy

#### 320 Cultures of Europe (3)

320 Cultures of Europe (3)
Prerequisite: Anthro 102 or equivalent. A cultural survey of Europe, focusing on the peasant, national, and pan-European traditions of Europe. Diverse anthropological approaches are used to examine changing boundaries of European identity from prehistory to the present "European Community."

#### 321 The American Indian (3)

Prerequisite: Anthro 102 or consent of instructor. North American Indians north of Mexico; origin, languages, culture areas, cultural history; the impact of European contacts.

#### 324A The Ancient Maya (3)

The archaeology and ethnohistory of the Maya area of Southern Mesoamerica. The problems of initial settlement of the area and the "rise" and dynamics of ancient Maya civilization.

#### 324B The Aztecs and Their Predecessors (3)

Archaeological survey of principal Mesoamerica pre-Columbian cultures north and west of Maya area. The Aztecs and their predecessors, religion, art, architecture, intellectual achievements and the Olmec heritage. vd about soabiv has smlft laid

#### 325 Peoples of South America (3) noo slaged avew and lo ani

Prerequisite: Anthro 102 or consent of instructor. Central and South America. Representative cultural areas before and after contacts with Western countries.

#### 327 Origins of Civilizations (3)

The development of civilization in both the Old and New Worlds in primary centers such as Mesopotamia, Egypt, the Indus Valley, China, Mesoamerica and Peru, and secondary centers such as the Aegean and Europe.

### 328 Peoples of Africa (3)

Prerequisite: Anthro 102 or consent of instructor. A cultural survey of Africa. Description of selected cultures and aspects of culture before and after contact with non-Africans.

#### 329 Peoples of the Caribbean (3)

Prerequisite: Anthro 102 or equivalent. A survey of the various ethnic groups of the Caribbean, focusing on the description and interpretation of African, European, Asian and Amerindian cultural elements.

#### 340 Peoples of Asia (3)

Prerequisite: Anthro 102 or consent of instructor. A survey of Asian civilizations and cultural traditions, emphasizing the study of the personality configurations in different culture areas, the analysis of the structure of Asian civilizations, and an examination of the peasant, tribal and ethnic groups of Asia.

#### 345 Peoples of the Middle East and North Africa (3)

Prerequisite: Anthro 102 or consent of instructor. Interrelationship between culture, economy, political structure and belief system of selected cultures in the Middle East and North Africa.

#### 346 Archaeology of the Holy Land (3)

Culture history of ancient Palestine from the Paleolithic to historic times. Changes in settlement patterns, resource base and sociopolitical organization.

#### 347 Peoples of the Pacific (3)

Prerequisite: Anthro 102 or consent of instructor. The indigenous peoples and cultures of the Pacific Islands, including Tahiti, Hawaii and Australia. The forces and processes contributing to social change in island communities and current problems being faced by them.

#### 360 Contemporary American Culture (3)

Prerequisite: Anthro 102 or consent of instructor. Application of anthropological methods, categories of analysis, and types of interpretation to American culture. Survey and critique of selected community studies and other kinds of relevant research.

#### 370 Anthropology of Non-Western Films (3)

Prerequisites: Anthro 100 or 102 or 104 or consent of instructor. Comparative analytical study of commercial and non-commercial films and videos made by non-western people. Films and videos considered as cultural artifacts that are particularly revealing of the ways people conceive of themselves and their cultures.

#### 400 Cultural Analysis: Qualitative Methods in Anthropology (3)

Prerequisite: Anthro 102. An examination of the qualitative methods that are used in the analysis of culture; review of recent methodologies developed in the framework of semiotic, phenomenological, and interpretive anthropology.

#### 401 Ethnographic Field Methods (3)

Prerequisites: Anthro 102 and six additional units of anthropology or consent of instructor. Anthropological field research by students on various problems using participant observation techniques.

#### 402 Museum Science (3)

Methods, principles and techniques used in natural history, and small scientific and historical museums. Subjects covered include scope of exhibit and research collections, care and repair of specimens, acquisitions, storage and preparation of presentations in anthropological, historical, biological and paleontological museums.

#### 403 Archaeological Fieldwork (3)

Prerequisites: Anthro 102 or 103 and consent of instructor. Excavation of a local archaeological site. Archaeological mapping, photography and recording. Laboratory methods of cataloging, preservation, description and interpretation of archaeological materials. Saturday field sessions. May be repeated once for credit as an elective. (1 hour lecture, 6 hours laboratory)

#### 404 Analytical Methods in Archaeology (3)

Prerequisites: Anthro 103 and 403. The employment of physical data collecting techniques (e.g., photographic, paleo-magnetic) in the field and the analysis of artifact collections and data from previous field operations in the laboratory. May be repeated once for credit as an elective. (1 hour lecture, 6 hours laboratory)

#### 405 Human Osteology (3)

Prerequisite: consent of instructor. Techniques in the basic identification of human skeletal remains. Aging, sexing, racing and stature reconstruction. For those interested in archaeology, hominid evolution and/or forensic science. (2 hours lecture, 3 hours laboratory)

### 406 Descriptive Linguistics (3)

(Same as Linguistics 406)

#### 407 Anthropological Video Production (3)

Prerequisites: Six upper-division units of anthropology or consent of instructor. Planning, shooting, and editing videotapes relating to all sub-disciplines of anthropology. (1 hour lecture; 6 hours laboratory activities, demonstrations, and fieldwork).

#### 409 Applied Anthropology (3)

Prerequisites: Anthro 102 or consent of instructor. The uses of anthropological skills and sensitivities in approaching contemporary human problems. Cultural change, organizational development, program planning and evaluation, the consultant's role, and professional ethics.

#### 410 Urban Anthropology (3)

Prerequisite: Anthro 102 or completion of general education category III.C.1. Introduction to Social Sciences. A cross-cultural investigation of similarities and differences in urbanism with an emphasis on current theoretical and methodological perspectives in the study of urban social and cultural forms and processes.

#### 411 Culture and Communication (3)

Prerequisite: Anthro 300 or consent of instructor. How culture meaning and manipulation are constituted in both traditional and modern cultures through language, mythology, ritual, architecture, religion, and other communication systems.

### 412 Culture Change (3)

Prerequisite: Anthro 102 or consent of instructor. Interrelations between cultural, social and psychological processes in the dynamics of culture growth and change. Impact of western technology on tribal and peasant societies. Anthropological contributions to the planning of directed sociocultural change in selected areas.

### 413 Culture & Personality: Psychological Anthropology (3)

Prerequisites: Anthro 102 or consent of instructor. The relationship between the individual and the culture. Child training in non-western cultures. Survey of concepts, studies, and research techniques.

#### 414 Economic Anthropology (3)

Prerequisite: Anthro 102 or consent of instructor. The ethnology and ethnography of economic life, principally in non-western societies; the operation of systems of production and distribution within diverse cultural contexts.

#### 415 Culture and Nutrition (3)

Prerequisites: Anthro 101 or 102 or consent of instructor. Interrelationships between human nutrition, basic food resources, individual development and socio-cultural organization; includes assessment of student's nutritional status, beliefs, and practices relative to other cultures.

#### 416 Anthropological Linguistics (3)

Nature and functions of language; language structure and change; classification of languages; use of linguistic evidence in anthropology. (Same as Linguistics 416)

#### 417 Life Quests (3)

Contemporary ways to wisdom and humanness in cross-cultural and historical perspectives. New and comparative approaches to understanding the life cycle, development and fulfillment of individual personalities.

#### 419 Shamanism in Cross-Cultural Perspective (3)

Prerequisite: Anthro 102 or consent of instructor. Shamanism, the earliest recorded religious systems of hunter/gatherers will be examined in terms of religious, political and artistic expression in historical and traditional third world societies. Implications for understanding charismatic resurgences in industrial societies will also be evaluated. (Same as Religious Studies 419)

#### 432 Woman in Cross-Cultural Perspective (3)

Prerequisite: Anthro 102 or consent of instructor. The influence of biological determinants as they are shaped by cultural beliefs, values, expectations and socially defined roles for women. The changing role of women in industrial society.

#### 440 Human Evolution (3)

Prerequisite: Anthro 101 or completion of general education category III.A.2. Advanced primate evolution; the origin of Homo sapiens as evidenced in the fossil record and through biochemical and molecular studies. Evolutionary theory and problems in human evolution. (2 hours lecture, 3 hours laboratory)

### 441 Human Variation (3) Applopment of glassical 1947

Prerequisite: Anthro 101. The processes underlying and the theories for the existence of the present variation between and within human populations. The genetics of human populations and the significance of racial classifications. (2 hours lecture, 3 hours laboratory)

### 442 Medical Anthropology (3)

Prerequisite: Anthro 101 or 102 or Psychology 101. Human health and disease and their relationship to cultural practices, beliefs and environmental factors; histories of various diseases as factors of cultural change; health care delivery systems.

#### 450 Culture and Education (3)

450 Culture and Education (3)
Prerequisite: Anthro 102 or consent of instructor. The transmission of values, implicit cultural assumptions, and the patterning of education in cross-cultural perspective. American culture and development problems.

#### 460 Public Archaeology in California (3)

An archaeological survey of California, emphasizing the examination of recent scientific excavations. Analysis of new archaeological methods, current research specializations, responsibilities of the modern archaeologist, and review of legislation affecting archaeology.

#### 470 Survey of Anthropological Films (3)

Prerequisites: Anthro 100 or 101 or 102 or 103 or 104 or consent of instructor. Survey and analysis of the uses of film and video in anthropological research, teaching, theory, methodology. Films are studied not only for their anthropological content, but also as artifacts of western culture which reveal significant aspects of that culture.

#### 476 Archaeological Investigations (3)

Prerequisites: Anthro 102 or 103 or consent of instructor. Methodology and practice of archaeological fieldwork. May be repeated for credit, with different topics. (1 hour lecture, 6 hours laboratory)

#### 480 History of Anthropology (3)

Prerequisite: Anthro 102 or consent of instructor. The principal contributions of anthropologists 1850-1950; evolutionary, diffusionist, historical, particularist, configurationalist, and culture and personality approaches in anthropology.

#### 481 Contemporary Anthropology (3)

Prerequisite: Anthro 102 or consent of instructor. Anthropologists from 1950 to the present; neoevolutionist, sociological, structuralist, psychological and symbolic approaches.

#### 490T Undergraduate Seminar in Anthropology (3)

Prerequisite: consent of instructor. Topics in anthropology. May be repeated for credit.

#### 491 Internship in Anthropology (3)

Prerequisites: 18 upper-division units in anthropology and/or related fields. Career opportunities. On-the-job training under faculty supervision in museum, industry or governmental service. May be repeated for credit for a total of six units.

#### 497 Ethnographic Investigations (3)

Prerequisites: Anthro 102 and Anthropology 401 or equivalent. Training in the methodologies of participant observation and interview techniques; investigation and description of cultural domains such as religion, health, economics, politics, and family, and ethnic boundaries. May be repeated for credit for a maximum of six units.

### 498 Museum Practicum (1-3) nemanal de bras surfic 2 004

Prerequisites: At least 15 units of anthropology and consent of instructor. Practical experience in Museum operations, using the facilities of the Anthropology Museum. Topics covered include exhibit preparation, membership and funding operations, catalogue preparation and outreach activities. May be repeated for a maximum of 3 units.

### 499 Independent Study (1-3)

Prerequisites: at least 15 units of anthropology and consent of adviser. Individual research project involving either library or fieldwork. Conferences with the adviser as necessary. Results in one or more papers. May be repeated for credit.

#### 501 Seminar: Methodology of Anthropological Research (3) Prerequisites: completion of undergraduate major in anthropology and/or graduate standing or consent of instructor. The contemporary methodological spectrum in anthropology and new trends in research planning and implementation.

#### 502 Contemporary Theory in Anthropology (3)

Prerequisite: Anthro 480 or consent of instructor. The basic assumptions and theoretical positions of leading contemporary anthropologists.

#### 504T Seminar: Selected Topics in Anthropology (3)

Prerequisites: completion of undergraduate major in anthropology and/or graduate standing or consent of instructor. The topic chosen and a general outline of the seminar is circulated prior to registration. May be repeated.

#### 505 Phonological Analysis (3)

(Same as Linguistics 505) (Same as Linguistics 505)

#### 507 Grammatical Analysis (3)

### (Same as Linguistics 507) 508. Theories of Syntax (3) 508 Theories of Syntax (3)

(Same as Linguistics 508) Prerequisite Wiltin 101 ... consent of tristructor.

#### 592 Fields Methods in Linguistics (3)

(Same as Linguistics 592)

#### 597 Project (3,6)

Prerequisites: graduate standing and consent of instructor. The completion of a project derived from original field or laboratory research, and/or on library study. May be repeated for credit to a maximum of 6 units. Parties of the Less transpolered laubivibra assessment of student's according of steers, beliefs, and resume

598 Thesis (3,6) Prerequisites: graduate standing and consent of instructor. The writing of a thesis based on original field or laboratory research, and/or on library study, and its analysis and evaluation. May be repeated for credit to a maximum of 6 units.

#### 599 Independent Graduate Research (1-3)

Prerequisite: consent of adviser. Individual research involving fieldwork, laboratory, or library study, and conferences with a project adviser as necessary, and resulting in one or more papers. May be repeated for credit.



# Department of Chicano Studies

Department Chair: Isaac Cardenas Department Office: Education Classroom 475

Programs Offered Bachelor of Arts in Ethnic Studies Option in Chicano Studies

Minor in Chicano Studies

### Chicano 445 Haunty of the Cheano 431 Chicano 453 Mexico Sance 1906 (1)

Isaac Cardenas, Dagoberto Fuentes, Adolfo Ortega, Joseph Platt

#### Advisers

Consult the department chair.

### INTRODUCTION | Alias management (310) oneside

Chicano studies examines the culture, language, education, history, politics, and socioeconomics of Americans of Mexican heritage. The major in Chicano studies emphasizes preparation for: (1) those interested in teaching either at the elementary and secondary level; (2) specialists in bilingual cross-cultural education; (3) majors in other academic fields such as liberal studies, history, sociology, psychology, literature, or anthropology, who wish to include additional scope to their field; (4) students pursuing advanced degrees (M.A. and Ph.D.); and (5) those entering a variety of occupations in urban affairs, government, social work, school administration, counseling, business, criminology, law, foreign service and other related areas.

The Chicano studies option consists of 36 units, of which a minimum of 24 units must be upper division. Students must consult with their advisers for an approved study plan. In addition. Chicano studies offers a minor consisting of 24 units.

#### CREDENTIAL INFORMATION

The Department of Chicano Studies offers course work leading to a CSUF Single Subject Waiver Program in Social Science. See the listing of required courses under the Department of Secondary Education.

The department also participates in the CSUF Generic Multiple Subjects Waiver. Information on requirements is available from departmental advisers and the Office of Admission to Teacher Education. Regarders OMASIRS VI SOVIM

All students interested in exploring careers in teaching at the elementary or secondary school levels should contact the Admission to Teacher Education Office and their academic adviser for assistance in planning their academic and professional preparation.

#### BACHELOR OF ARTS IN ETHNIC STUDIES OPTION IN CHICANO STUDIES

A total of 36 units from the following courses are required:

#### Lower Division (6 units minimum)

Chicano 106 Intro to Chicano Studies (3)

Chicano 220 Mexican Heritage (3)

#### Upper Division (24 units minimum)

Required Courses (9 units)

(to be selected from the following courses)

Chicano 430 Evolution of Mexican Literature (3)

Chicano 431 The Chicano Child (3)

Chicano 440 Mexican Intellectual Thought (3)

Chicano 445 History of the Chicano (3)

Chicano 453 Mexico Since 1906 (3)

Upper Division Writing Requirement (3 units)

English 301 Advanced College Writing (3)

Electives (12 units minimum)

Chicano 102 Communication Skills (3)

Chicano 190 Survey of American History with Emphasis on Ethnic Minorities (3)

Chicano 302 Ancient Mexican Culture (3)

Chicano 304 Music of Mexico (3) (same as Music 304)

Chicano 305 The Chicano Family (3)

Chicano 306 Barrio Studies (3)

Chicano 315 Chicano/Latino Theater (3)

Chicano 316 The Chicano Music Experience (3)

Chicano 336 Main Trends in Spanish-American

Literature (3)

Chicano 337 Contemporary Chicano Literature (3)

Chicano 360 Chicanos and the Law (3)

Chicano 402 Urban Minority Politics (3)

Chicano 403 Cultural Differences in Mexico and the

Southwest (3)

Chicano 406 La Chicana (3)

Chicano 430 Evolution of Mexican Literature (3)

Chicano 431 The Chicano Child (3)

Chicano 432 The Chicano Adolescent (3)

Chicano 433 Mexican Literature Since 1940 (3)

Chicano 440 Mexican Intellectual Thought (3)

Chicano 445 History of the Chicano (3)

Chicano 450 The Chicano and Contemporary

Issues (3)

Chicano 453 Mexico Since 1906 (3)

Chicano 460 The Chicano and Politics (3)

Chicano 480 The Immigrant and the Chicano (3)

Chicano 499 Independent Study (1-3)

#### MINOR IN CHICANO STUDIES

The minor in Chicano Studies consists of 24 units in the following areas: A selection bloods aleast trades make a second and

#### Required lower-division courses (6 units)

Chicano 106 Intro to Chicano Studies (3)

Chicano 220 Mexican Heritage (3)

#### Required upper-division courses (9 units)

(to be selected from the following)

Chicano 430 The Evolution of Mexican Literature (3)

Chicano 431 The Chicano Child (3)

Chicano 440 Mexican Intellectual Thought (3)

Chicano 445 History of the Chicano (3)

Chicano 453 Mexico Since 1906 (3)

#### Approved electives

Nine units of approved course work in lower- and upper-division classes that are selected by the adviser.

#### GRADUATE STUDY

Chicano Studies offers courses for advanced study in the following graduate degree programs:

Master of Arts in Social Sciences

Master of Science in Education: Bilingual/Bicultural

Concentration

Master of Arts in Spanish: Bilingual Studies Concentration

### Chicano Studies Courses

#### 102 Communication Skills (3)

The basic communication skills including oral and written expression. A unit on the mechanics of writing and reporting on a term paper.

#### 106 Introduction to Chicano Studies (3)

The role of the Chicano in the United States. The Chicano's cultural values, social organization, urbanization patterns, and the problems in the area of education, politics and legislation.

#### 190 Survey of American History with

Emphasis on Ethnic Minorities (3)

(Same as History 190 and Afro-Ethnic Studies 190. This course fulfills Title V, Statutory Requirements.)

#### 220 Mexican Heritage (3)

The basic characteristics of the Mexican, especially the Chicano society and culture. From 1519 to the present. Emphasis on the arts, literature and history of Mexico and the Chicano in the United States.

#### 302 Ancient Mexican Culture (3)

An historical and cultural survey of the principal pre-Columbian cultures of Mexico and their significance for Mexican society.

#### 304 Music of Mexico

(Same as Music 304)

305 The Chicano Family (3)

The Chicano family development as an American social institution. Historical and cross-cultural perspectives. The socio-, and psychodynamics of the Chicano family.

306 Barrio Studies (3)

Prerequisite: Chicano Studies 220 or consent of instructor. The major characteristics of the barrio. Supervised fieldwork in the barrio is required. Analysis of the barrio or agency will be made after fieldwork is completed. (2 hours lecture, 3 hours fieldwork)

315 Chicano/Latino Theater (3)

Prerequisites: Either upper-division standing, consent of instructor, or Theatre 100. Analysis of contemporary Chicano/Latino theater in relation to its historical evolution. Emphasis on plays, playwrights and theater groups expressing the Chicano/Latino experience. Extensive play reading. (Same as Theater 315).

316 The Chicano Music Experience (3)

Mexican folk and popular music and its relation to the culture which produced it. The pre-Cortesian period to the present in Mexico and in the Southwestern United States.

336 Main Trends in Spanish-American Literature (3)

The main currents of Spanish-American literature emphasizing contemporary works. The relation between the artistic expression and the ideological values of the period.

337 Contemporary Chicano Literature (3)

Prerequisite: Chicano Studies 106, or 220, or consent of instructor. The modern Chicano writers in the United States: Allurista, Corky Gonzales, Octavio Romano, el treatro campesino and the major Chicano magazines and newspapers.

360 Chicanos and the Law (3)

The relationship between Chicanos and the legal and judicial system, including the administration of justice, Chicano-police relations, and Chicanos and the prison system. Guest speakers will be a regular feature.

402 Urban Minority Politics (3)

(Same as Poli Sci 402 and Afro 402)

403 Cultural Differences in Mexico & the Southwest (3)

The cultural conflicts in Mexico as seen by the contemporary thinkers of Mexico and the United States. Urban and rural problems.

406 La Chicana (3)

The cultural influences that the family, religion, economic status and community play upon the lifestyles, the values and the roles held by Chicanas.

430 The Evolution of Mexican Literature (3)

Survey and analysis of the Nahautl, Mexican and Chicano literature from the pre-Columbian period to the present.

431 The Chicano Child (3)

The Chicano child from preschool through grade six. Motor, physical, social, intellectual and emotional growth and development and their effect on school adjustment and achievement. Observation of preschool and grade school children.

432 The Chicano Adolescent (3)

The Chicano adolescents' social, intellectual and emotional growth and development. The bicultural pressures from the barrio, family structure, school and achievement values.

433 Mexican Literature Since 1940 (3)

The literature of Mexico since 1940: Carlos Fuentes, Luis Spota, Rodolfo Usigli, Xavier Villarrutia, Juan Jose Arreola, Octavio Paz, Roberto Blanco Moheno and Luis G. Basurto.

440 Mexican Intellectual Thought (3)

Prerequisite: reading knowledge of Spanish and Chicano Studies 302 recommended. The emergence of the Chicano movement dealing with political, economic and sociological facets. The writings of the Nahautl, Spanish, Spanish-American, Chicano and contemporary writers.

445 History of the Chicano (3) Management and Bouloge

History of the Chicano from the pre-Columbian period to the present. The Chicanos' changing role in the United States, their cultural identity crisis and their achievements.

450 The Chicano and Contemporary Issues (3)

The socioeconomic and political problems confronting the Chicano including proposed solutions. The effect that social institutions have had on the Chicano community.

453 Mexico Since 1906 (3)

Prerequisite: upper division class standing. The Mexican Revolution of 1910 stressing the political, economic and social aspects as well as its contributions in the fields of art, literature and social reforms.

460 The Chicano and Politics (3)

Theory of urban politics and evaluation of issues that affect the Chicanos and American society. Evaluations and surveys will be made on political organizations in the Hispanic-surnamed communities. (Same as Political Science 460)

480 The Immigrant and the Chicano (3)

Mexican immigration to the United States and its social, economic and political impacts on the Chicano and non-Chicano communities and other immigrant groups.

499 Independent Study (1-3) And Ismand, SEE

Prerequisites: senior level and approval by the department chair and instructor(s) in charge of directing the study. An opportunity to do independent study, under the guidance of the faculty, of a subject of special interest to the student. accommised leading

599 Independent Graduate Research (1-3)

Prerequisites: consent of instructor and classified status. Individual research for Chicano studies components in Master of Arts in Bilingual Studies (Spanish), Master of Science in Bilingual Education (Education) and related programs. Maximum of 3 hours credit.

# Conservation Program

Program Coordinator: Imre Sutton (Geography) Program Office: McCarthy Hall 103 Coordinator's Office: Humanities 429E

Programs Offered
Minor in Conservation

#### Faculty (Conservation Minor Council)

Larry de Graaf (History), Michael Horn (Biological Sciences), Joanne Jasin (English), and Morteza Rahmatian (Economics).

#### INTRODUCTION

Conservation, fundamental to the lives of all humans, is a recognized field of inquiry, identified with teaching, research and applied resource management. As a free-standing minor, it is an ideal complement to many undergraduate programs, for it attempts to pull together relevant instruction across the disciplines. While the minor does not prepare specialists, it strengthens disciplinary preparation where students seek an environmental calling. Today's employment market calls for multiple training in environmental fields; moreover, conservation knowledge broadens one's perspective and capacity to participate in the changing environment about us.

The Conservation Minor is structured in order to require breadth across three academic arenas, but it allows for some options. Regardless of the distribution of elective choices, no more than 9 units may be selected from any one discipline, and a minimum of 4 disciplines must be maintained. Independent study or internship may be elected for a total of 3 units from any relevant department with prior approval of the coordinator; these units may be applied to B, C, or D.

### MINOR IN CONSERVATION

The minor consists of 21 units, as follows:

Core Course (3 units) 34 5000008 (assisted as formed) assistant

Geography 350 Conservation and Ecology in American (3)

Physical/Biological/Ecological Studies (6 units)

Anthro 442 Medical Anthropology (3)

Biology 316 Principles of Factory (4) Biology 316 Principles of Ecology (4)
Biology 318 Wildlife Conservation (3)
Biology 330 Ecology of American Indians (3)

Geography 352 National Parks (3)
Geological Sci 335 Hydrology (3)
Sociology 360 Human Ecology (3)

### Political/Institutional Studies (6 units)

Economics 362 Environmental Economics (3) Economics 462 Natural Resource Economics (3) Geography 468 Law and Environment (3) Poli Sci 482 Environmental Policy and Politics (3)

#### Human/Cultural Studies (6 units)

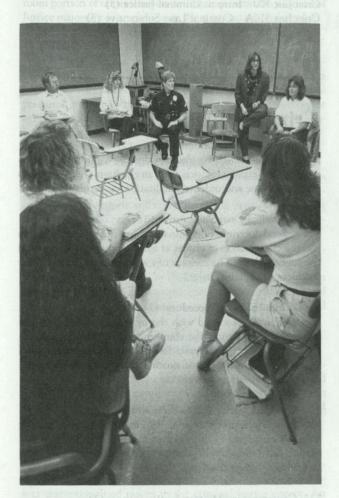
Afro 437 American Indian Religions and Philosophy (3) American Studies 401 Proseminar: Culture and Nature (3) History 396 Introduction to Public History (3) Philosophy 313 Environmental Ethics (3)
Psychology 350 Environmental Psychology (3)



400 La Chicana (3)
The cultural influences that the lambs religion, economic status

The Chicano child from preschool through grade six. Monor, physical, social, intellectual and each fought growth and development and achievement menument after the school adjustment and achievement.

431 The Chicano Child (3)



# Department of Criminal Justice

Department Chair: Sandra Sutphen Department Office: Education Classroom 622

Programs Offered Bachelor of Arts in Criminal Justice Minor in Criminal Justice (align (1) melanismo) avirsal

#### Crem lust 325 Contemporary Military Justice System vilusar

W. Garrett Capune, George M. Derv, III, James Farris, Ruth-Ellen Grimes, James Lasley, Jill Rosenbaum

#### Advisers

All full-time faculty with the department are advisers; see Criminal Justice bulletin board for names, office hours and room numbers.

#### INTRODUCTION

Criminal justice is the study of the causes, consequences and control of crime. Like other new and developing fields, criminal justice is difficult to define as it draws from a number of different disciplines, including psychology, public administration, philosophy, sociology and law.

The program leading to the Bachelor of Arts in Criminal Justice is designed to acquaint preservice and inservice students with the principles and practices of criminal justice in America. Although the department's curriculum allows for the development of depth in one of the subject's substantive subsystems (i.e., law enforcement, courts or corrections), the overriding objective is to familiarize students with activities in all the above areas.

The department is both academic and professional in that it is an interdisciplinary attempt to relate intellectual issues and practitioner perspectives to the challenge of crime in a free society. In this regard, the department provides preparation for employment with a related agency and/or further study, (e.g., law school).

#### AWARDS IN CRIMINAL JUSTICE

Two graduating seniors are acknowledged each year with the Activities Award and the Outstanding Scholastic Achievement Award.

#### BACHELOR OF ARTS IN CRIMINAL JUSTICE

Every student must complete the core courses (15 units) and a minimum of 12 units from the elective curriculum. In addition, each student is required to complete 12 units in a correlated curriculum. sle externatives of the control of the curriculum.

Criminal Justice bulletin board a grown to soo at any

For current information regarding the criminal justice program and its courses, consult the department's bulletin board in the hallway near EC-622.

#### Core Curriculum (15 units)

Crim Just 300 Introduction to Criminal Justice (3)

Crim Just 310A Criminal Law: Substantive (3)

Crim Just 320 Criminal Justice Administration (3)

Crim Just 330 Crime and Delinquency (3)

Crim Just 340 Criminal Justice Research

Methodology (3)

#### Elective Curriculum (12 units)

Crim Just 310B Criminal Law: Procedural (3)

Crim Just 325 Contemporary Military Justice System (3)

Crim Just 350 Principles and Concepts of Investigation and Reporting (3)

Crim Just 415 The Enforcement Function (3)

Crim Just 425 Juvenile Justice Administration (3)

Crim Just 430 Women and Crime (3)

Crim Just 435 Adjudication and the Judiciary (3)

Crim Just 440 Minorities and the Criminal Justice

System (3)

Crim Just 445 Corrections (3)

Crim Just 450 Organized Crime and Intelligence Analysis (3)

Crim Just 455 Gangs and the Criminal Justice System (3)

Crim Just 460 Private Police: Legal Issues (3)

Crim Just 475 Topics in Administration of Justice:

A Seminar (3)

Crim Just 480 Courtroom Evidence (3)

Crim Just 485 Search, Seizure and Interrogation I (3)

Crim Just 486 Search, Seizure and Interrogation II (3)

Crim Just 495 Internships (3)

Crim Just 499 Independent Study (3)

#### Correlated Curriculum (12 units)

Courses in the related fields shall be selected by the student in consultation with an adviser. The purpose of this requirement is to allow for an awareness of the disciplines contributing to the creation of "criminal justice" as a separate subject. Upper division courses in such fields as philosophy, political science, psychology and sociology may be considered in this regard. For a list of courses that can count in this regard, see the Criminal Justice bulletin board.

#### Writing Requirement (3 units)

One of the following courses:

Crim Just 350 Principles and Concepts of Investigation and Reporting (3)

English 301 Advanced College Writing (3)

English 365 Legal Writing (3)

For further information on these alternatives, please see the Criminal Justice bulletin board.

#### MINOR IN CRIMINAL JUSTICE

The Minor in Criminal Justice consists of a total of 18 units including three required and three elective courses to be chosen from the criminal justice curriculum. The required courses are:

Crim Just 300 Intro to Criminal Justice (3)

Crim Just 310A Criminal Law: Substantive (3)

Crim Just 330 Crime and Delinquency (3)

### Criminal Justice Courses

#### 300 Introduction to Criminal Justice (3)

A study of the underlying ideological issues confronting America's system of criminal justice, with an emphasis on key concepts in conflict (law and order, rehabilitation vs. retribution, etc.)

#### 310A Criminal Law: Substantive (3)

The general doctrines of criminal liability in the United States and the classification of crimes as against persons, property and the public welfare. The concept of governmental sanction of the conduct of the individual.

#### 310B Criminal Law: Procedural (3)

Legal problems associated with the investigation of crime, the acquisition of evidence, the commencement of a criminal proceeding, the prosecution and defense of charges, sentencing and appeal. The development of existing procedures and examination of current efforts for reform.

#### 320 Criminal Justice Administration (3)

Justice administration as a "single system;" modern management materials as applied to the involved institutions; line, staff and auxiliary activities both in principle and practice, and the associated administrative theories.

#### 325 Contemporary Military Justice System (3)

Evolution of the military justice system. Comparisons to the civilian legal system. Practical application of concepts and requirements, including investigations, searches, charges, judicial and non-judicial punishments. (Same as Military Science 325)

#### 330 Crime and Delinquency (3)

The nature and extent of criminality; traditional and topical theories regarding etiology; research methods, sociological and psychological theories.

#### 340 Criminal Justice Research Methodology (3)

Elementary statistics including descriptives, measurements and tests; data collection methods for effort evaluation and program prediction; systems analysis techniques.

#### 350 Principles and Concepts of Investigation and Reporting (3)

Prerequisite: Crim Just 300 or consent of instructor. Principles of investigative activity practiced by police, courts and correctional subsystems. Reporting procedures and requirements. Meets classroom portion of upper-division writing requirement for Criminal Justice majors, or as an elective in the concentration curriculum.

#### 415 The Enforcement Function (3)

Prerequisite: Crim Just 300 or consent of instructor. The historical and philosophical development of the enforcement function at federal, state and local levels; community controls, political pressures and legal limitations pertaining to law enforcement agencies at each level of government; police policies and problems vis-a-vis the administration of justice as a system.

#### 425 Juvenile Justice Administration (3)

Prerequisite: Crim Just 300 or consent of instructor. Definitions of "delinquency" and the related responses of the interested institutions (police, courts and correction); the juvenile court (past and present), and prevention and correction programs (practicing and proposed).

#### 430 Women and Crime (3)

Prerequisite: Crim Just 300 or Philosophy 302. An examination of women as criminals and victims, gender differences in criminal behavior and the role of women as professionals in the criminal justice system.

#### 435 Adjudication and the Judiciary (3)

Prerequisite: Crim Just 300 or consent of instructor. The associated sociolegal doctrine and institutions at the federal, state and local levels; political controls and legal limitations pertaining to each; the nature of the judicial process; the participants' roles and relationships to the administration of justice as a system.

#### 440 Minorities and the Criminal Justice System (3)

Prerequisites: Crim Just 300 or consent of instructor. An introduction to the issues surrounding the charges of overt and indirect institutionalized racism in the criminal justice system. An overview of patterns of criminal behavior among minority groups in the U.S. will be discussed.

#### 445 Corrections (3)

Prerequisite: Crim Just 300 or consent of instructor. An overview of the origins, processes, organization, and contemporary trends of corrections in America. Course will target management, control, and treatment of adult and juvenile offenders in both institutions and community programs.

#### 450 Organized Crime and Intelligence Analysis (3)

Prerequisite: Crim Just 300. History and development of organized crime. Current criminological strategies of control of organizational crime. Systems theories and other analytical techniques of police intelligence.

#### 455 Gangs and the Criminal Justice System (3)

Prerequisites: Crim Just 300 or consent of instructor. Causal factors of and legal solutions to gang related crime in the United States are examined. Relevance of sociological, psychological, economic, and educational deviance theories to justice intervention strategies is emphasized.

#### 460 Private Police: Legal Issues (3)

Prerequisite: Crim lust 300 or consent of instructor. An analysis of the legalities associated with private policing, such as the application of exclusionary rules in criminal prosecutions and the issue of adequacy as it relates to liability.

#### 475T Topics in Administration of Justice: A Seminar (3)

Prerequisite: Crim Just 300 or consent of instructor. Current social, legal and practical problems confronting the police, the courts and corrections. A "variable topic" class with specific subjects to be announced each semester.

#### 480 Courtroom Evidence (3)

Prerequisite: Crim lust 300 or consent of instructor. The rules of evidence in the context of a criminal trial in a California court. The rules, their application and their rationale. Lecture, discussion and simulated courtroom situations.

#### 485 Search, Seizure and Interrogation I (3)

Prerequisite: Crim Just 300 or consent of instructor. An analysis of the laws that apply in common street search-and-seizure and interrogation situations in California; how they have evolved, and what developments are anticipated.

#### 486 Search, Seizure and Interrogation II (3)

Prerequisites: Crim Just 300 or consent of instructor. An analysis of the laws that apply in some of the less common search-andseizure and interrogation situations, such as those involving the border patrol and school officials.

#### 495 Internships (3)

Prerequisites: Crim Just 300 and consent of instructor. The criminal justice professions; eight to 20 hours per week as a supervised intern in a public agency or related organization. In addition to the job experience, interns meet in a weekly three-hour seminar.

#### 499 Independent Study (1-3)

Prerequisites: at least 12 hours of criminal justice and consent of adviser. Student selects an individual research project, either library or field. Conferences with adviser as necessary, culminating in one or more papers. May be repeated for credit.

# Department of English and Comparative Literature

Department Chair: Joseph Sawicki Vice Chair: Rosemary Boston Department Office: Humanities 715F

Programs Offered Bachelor of Arts in Comparative Literature Master of Arts in Comparative Literature Bachelor of Arts in English Minor in English Master of Arts in English

#### Faculty

Cornell Bonca, Rosemary Boston, John Brugaletta, Deborah Dietrich, Sheryl Fontaine, George Friend, Stephen Garber, Joanne Gass, Joan Greenwood, Jean Hall, Mary Hayden, Jane Hipolito, Robert Hodges, Joanne Jasin, Helen Jaskoski, Susan Jacobsen, Thomas Klammer, William Koon, Mohsen Mirshafiei, Susan Morrison, Helen Mugambi, Keith Neilson, Paul Obler, June Pollak, Sally Romotsky, Joseph Sawicki, Muriel Schulz, Donald Sears, Howard Seller, George Spangler, Kay Stanton, Atara Stein, Mary Kay Tirrell, John White, Helen Yanko, Heping Zhao

#### Advisers

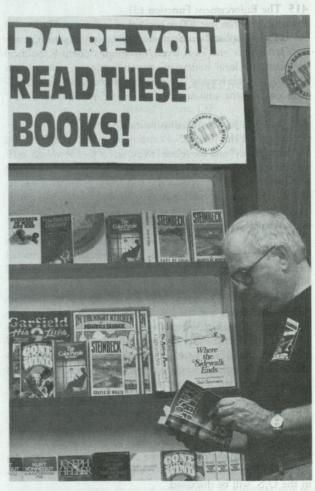
Undergraduate: All full-time faculty members serve as advisers. Graduate: Howard Seller Teaching Credential: John White

An annual conference with a faculty adviser is required. New students must confer with an adviser in each of the first two semesters.

#### INTRODUCTION

The discipline of English includes the study of British and American literature, the various kinds of writing, and the history, structure and dialects of the English language,

The major in English is a flexible program emphasizing skill in writing, familiarity with and appreciation of the literatures of England and America, and knowledge of the nature and development of the English language.



Comparative literature is the study of world literature without specific regard for national or linguistic boundaries. It is comparative in that it deals with the relationships among different literatures. The comparatist studies not only the international literary masterpieces and historical periods of world literature, but also examines critical theories from a cross-cultural perspective. The major in comparative literature promotes the understanding of world literatures and cultures in various historical periods, including the present, for students with a special concern for the relationships among the languages and literatures of various civilizations. Comparative literature courses are conducted in English, and required reading is available in English.

The study of literature and language helps students to achieve a mature understanding of themselves and the world and to learn to read critically and analytically, write clearly and persuasively, and reason soundly. For these reasons such study is ideal preparation for professional training in fields such as law, medicine, and religion, or for responsible positions in business and industry. The major in English may be combined with preparation for elementary and secondary school teaching. In addition, the majors in English and comparative literature provide a foundation for students who intend to work for advanced degrees in preparation for college teaching.

#### Credential Information

The English Department offers course work leading to a waiver in English for the Ryan Single Subject (secondary) Teaching Credential. Students seeking a Multiple Subjects (elementary) Teaching Credential may choose to major in English and fulfill credential requirements under the Generic Multiple Subjects Waiver Program.

All students interested in majoring in English in preparation for teaching should contact the English Education Coordinator in the English Department. The book to subsume the English Department, and the book to subsume the English Department.

#### BACHELOR OF ARTS IN COMPARATIVE LITERATURE

All students must complete a total of 42 units of upper-division courses. In selecting courses, students are urged to consult a faculty adviser.

Required Courses (English 300 and 18 units in comparative literature, including Comparative Literature 324, 325, and either English 450 or 315).

British and American Literature (6 upper-division units listed under English)

Breadth Requirement (6 adviser-approved units in anthropology, history, art history, music history or philosophy)

Electives (9 upper-division units in literature courses listed under Comparative Literature, English, French, German, Italian, Russian, or Spanish or another adviser-approved foreign language)

#### Reading Competence in a Foreign Language

This requirement can be met by examination or by successful completion of an adviser-approved 400-level course offered by the Department of Foreign Languages and Literatures, provided it is not taught in translation. Information on the examination is available in the Department of English and Comparative Literature office.

#### MASTER OF ARTS IN COMPARATIVE LITERATURE

The master's degree program in comparative literature promotes the understanding of other literatures, peoples and cultures in various historical periods, including the present, provides background for more advanced degrees, prepares teachers of world literature in the high schools and community colleges and provides a liberal arts background for library studies.

#### Admission to Graduate Standing: Conditionally Classified

University requirements include a bachelor's degree from an accredited institution and a minimum GPA of 2.5 in the last 60 semester units attempted.

### Graduate Standing: Classified

Classified standing requires:

1. An undergraduate major in comparative literature, English or foreign language with a GPA of 3.0 or better in the major courses and a GPA of 2.5 in all other college and/or university work. If the student's degree is in another field, a total of 24 units of upper-division work in comparative literature, English or foreign language with a GPA of 3.0 will be required.

If the student lacks the prerequisite number of courses, they must be taken before beginning work in the master's degree program, with at least a 3.0 in such makeup course work. If the student's GPA in these probationary courses is 3.0 or better, classified standing may be granted. Courses taken to remove qualitative and quantitative deficiencies may not be applied to the M.A. program. (atima (1) assessed barispas)

- 2. Satisfactory completion of a written examination in an adviser-approved foreign language, or satisfactory completion of an upper-division course taught in an adviser-approved foreign language.
- 3. Development of an approved study plan.

#### Study Plan

A minimum of 30 units of course work must be completed with a minimum GPA of 3.0 to be distributed as follows:

Units

#### 1. A minimum of 18 units in 500-series courses:

Courses at the 500 level in comparative literature or
courses cross-listed in English (one adviser-approved
500-level course in English may help satisfy this re-
quirement)
A course at the 500 level in a related area

#### 2. Upper division courses (12 units):

The master's degree program to according to be according to	
Adviser-approved courses in comparative	
literature	
At least 3 units of related course work must be in	
foreign literature, read in the original	
language.)	
Total	30

At the conclusion of all course work, the student will take a comprehensive examination for the master's degree. Each section of the four-part comprehensive examination must be passed before the degree will be awarded. Any section(s) failed may be repeated once only. Notice of intention to take the examination must be on file with the graduate secretary within six weeks of the first class of the semester.

#### Thesis Option

The candidate may elect to write a thesis. For information consult the graduate adviser.

For further information, consult the Department of English and Comparative Literature.

#### BACHELOR OF ARTS IN ENGLISH

All students must complete a total of 42 units in addition to English 101 or its equivalent. At least 30 units must be upperdivision courses. In selecting courses, students are urged to consult a faculty member of the Department of English and Comhetter, classified standing may be grants. Standing the properties of standards and quantitative debelerates may not be

#### 

English 300	Analysis of Literary Forms (	3)
English 301	Advanced College Writing (	3)
English 316	Shakaanaara (3)	

#### Survey Courses (at least 6 units)

English 311	British Literature to 1760 (3)
English 312	British Literature from 1760 (3)
English 321	American Literature to Whitman (3)
English 322	American Literature from Twain to the
	English 312 English 321

Moderns (3) Comp Lit 324 World Literature to 1650 (3)

World Literature from 1650 (3) Comp Lit 325

Period, Genre and Criticism Courses (at least 9 units, including at least 3 units from courses prior to 1800, i.e., 423, 450, 451, 

English	423	Early American Literature	(3)
r 1. 1	150	1/ 1/ 1/1/ /25	

English 450 Medieval Literature (3) and a sommon only and

English 451 Elizabethan and Jacobean Drama (3)

English 452 Elizabethan Poetry and Prose (3)

English 453 17th-Century Poetry and Prose (3)

English 454 The Drama of the Restoration and the 18th Century (3)

English 455 Restoration and 18th Century Poetry and

Prose (3)

English 456 The Development of the English Novel Through Iane Austen (3)

English 457 The Romantic Movement in English Literature (3)

Victorian Literature (3) English 458

English 459 The Development of the 19th Century English

Novel (3)

English 462 Modern British and American Novels (3)

English 463 Contemporary Novels in English (3)

Modern British and American Drama (3) English 464

English 465 Contemporary Drama in English (3) English 466 Modern British and American Poetry (3)

Contemporary Poetry in English (3) English 467

Traditions of English Literary Criticism (3) English 491

#### Major Author Courses (at least 3 units)

English 315 Chaucer (3) English 317 Milton (3)

#### Language Courses (at least 3 units)

English 303 Structure of Modern English (3) English 305 The English Language in America (3)

English 440 History of the English Language (3)

#### Electives (at least 12 units)

Chosen from English and comparative literature courses númbered 201 and above.

#### MINOR IN ENGLISH

Students must complete a total of 21 units, including 15 units as described below and six units of electives. In selecting courses, students seeking a minor in English should consult a faculty member of the Department of English and Comparative Literature.

#### Required Courses (9 units) (100 and 150 and 15

Analysis of Literary Forms (3) English 300 Advanced College Writing (3) English 301

Shakespeare (3) English 316

### Survey Courses (at least 6 units) (1) survey Courses (at least 6 units)

English 311 British Literature to 1760 (3)

English 312 British Literature from 1760 (3)

English 321 American Literature to Whitman (3)

English 322 American Literature from Twain to the

Moderns (3)

Comp Lit 324 World Literature to 1650 (3)

Comp Lit 325 World Literature from 1650 (3)

#### Electives (at least 6 units)

Chosen from additional English and Comparative Literature courses, with the exception of English 101 and 106.

Students may take the approved upper-division writing course(s) in their majors instead of English 301. They must, however, complete 21 units in English and Comparative Literature.

#### MASTER OF ARTS IN ENGLISH

The master's degree program in English offers students the opportunity to achieve a multifaceted understanding of literature and language as well as to study particular areas of their own interest. Such areas include literature, linguistics, creative writing and the teaching of English. The degree is useful to those teaching in high schools or community colleges, to those seeking careers in writing and publishing, and to those intending to take further graduate work.

#### Admission to Graduate Standing: Conditionally Classified

University requirements include a bachelor's degree from an accredited institution and a minimum GPA of 2.5 in the last 60 semester units attempted.

#### Graduate Standing: Classified

Classified graduate standing requires a bachelor's degree in English from an accredited institution with at least a 3.0 grade-point average in the major courses provided that a minimum of 24 units of upper-division course work is included; or if the student holds a bachelor's degree in another major, 24 units of upper-division course work in English with at least a 3.0 grade-point average must have been completed. If the student lacks the prerequisite number of English courses, they must be made up before beginning work in the master's degree program, with at least a 3.0 in such makeup course work. In the event that the student's GPA in prerequisite English courses is less than 3.0, six to nine units of probationary, adviser-approved course work may be assigned. If the GPA in these probationary courses is 3.0 or better, the student may be classified. Some courses taken to make up qualitative deficiencies may be credited toward the M.A., if completed with a grade of B or better, and if applicable to the student's particular study plan. Courses taken to remove quantitative deficiencies may not be applied to the M.A. program.

A student is required to have two years of one foreign language at the college or university level, an approved foreign language examination, or six units of study in comparative literature. If taken as graduate work, these six units may be applied to the master's degree under "units in subjects related to English."

A study plan must be developed and approved for admission to classified graduate standing.

#### Study Plan

Units (800, dathurd as some)
Minimum units in English courses restricted
to graduate students (500 series)
(with the permission of the graduate adviser, 3 of these 18
units may be taken in a comparative literature graduate
seminar)
Units in specified upper-division courses in
English 6-12
Maximum units in subjects related to English 6
Total required units

To complete the degree requirements, students must pass a written comprehensive examination. Failed parts of the examination may be retaken only once. Notice of intention to take the examination must be on file with the graduate secretary within six weeks of the first class of the semester. With approval, students may substitute a research or creative writing project for one part of the examination.

Note: The student is strongly advised to take the steps necessary for admission to the program before registering for the first graduate courses. Part of the admission process is to confer with the graduate adviser, who will analyze prerequisites and designate those courses which will apply to the degree program. Courses taken by a conditionally classified student do not necessarily apply toward a degree. At the time the student achieves classified standing, no more than nine units of postgraduate course work may be applied to the master's degree program. For further information, consult the Department of English and Comparative Literature.

### Comparative Literature Courses

110 Literature of the Western World from Ancient through Medieval Times (3) (Same as English 110) America (Manuscrotti mare)

111 Literature of the Western World from the Renaissance through the 19th Century (3) (Same as English 111)

#### 202 Short Story (3)

(Same as English 202)

#### 203 Introduction to the Novel (3)

The techniques and structure of representative European and American novels. (Same as English 203)

#### 205 Introduction to Drama (3)

(Same as English 205)

#### 206 Introduction to Poetry (3)

(Same as English 206)

#### 257 Writing Haiku (1)

(Same as English 257)

#### 312 The Bible as Literature (3)

Prerequisite: upper-division standing. Literary qualities of biblical literature and the influence of major themes upon Western literary traditions. (Same as Religious Studies 312)

#### 315 Classical Mythology in World Literature (3)

Prerequisite: upper-division standing. Greek and Roman myths which have been of continuing significance in Western world literature.

#### 320 Greek and Roman Literature (3)

Readings in English translation from the literature of classical Greece and Rome.

#### 321 Germanic Mythology and Saga Literature (3)

Germanic mythology, including comparative myth and archeological relationships, and Icelandic saga.

#### 324 World Literature to 1650 (3)

Prerequisite: upper-division standing. Oriental and western literature from the beginning to 1650.

#### 325 World Literature from 1650 (3)

Prerequisite: upper-division standing. Oriental and Western literature from 1650 to the present.

#### 355T Images of Women in Literature (3)

(Same as English 355T)

#### 360 Irish Literature (3)

Irish literature from the early Middle Ages to the present.

#### 373 Masters of Russian Literature (3)

Prerequisite: upper-division standing. Pushkin, Gogol, Dostoyevsky, Tolstoy, Chekhov and others, and their relationship to Western literature.

#### 374 Soviet Literature (3)

Prerequisite: upper-division standing. Soviet peoples' literature from 1918 to the present. Basic trends in literary criticism. Authors studied: Gorky, Blok, Mayakovsky, Zamyatin, A. Tolstoy, Zoshchenko, Sholokhov, Pasternak, Rozov, Evtushenko, Voznesensky, and others.

### 380 Introduction to Asian Literature (3)

Prerequisite: upper-division standing. Selected translations of Arabic, Persian, Indian, Chinese and Japanese literature.

#### 381 African Literature (3) (Formerly 352)

(Same as English 381 and Afro-Ethnic Studies 381)

#### 423T Topics in Asian Literature (3)

Prerequisites: upper-division standing and English 200 or other appropriate course approved by the instructor. Specific topics will vary from semester to semester. May be repeated with different content for additional credit.

#### 450 Medieval Literature (3) (Formerly 332)

(Same as English 450)

#### 451 Literature of the Renaissance (3) (Formerly 333)

Prerequisites: survey of English, American, or world literature; an upper-division literature course; or equivalent. The Renaissance as a literary movement, from Erasmus to Montaigne and Cervantes.

#### 465 The Novel in France and Germany (3) (Formerly 453)

Prerequisites: survey of English, American, or world literature; an upper-division literature course; or equivalent. Novels in translation; principles of the narrative arts. Goethe, Stendhal, Flaubert, Mann, Kafka, Proust and others.

#### 499 Independent Study (1-3)

# 572T Graduate Seminar: Literary Genres (3) (Same as English 572T)

574T Graduate Seminar: Special Problems in Literature (3) (Same as English 574T)

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#### 579T Graduate Seminar: Problems in Criticism (3) w 201100

(Same as English 579T) but and the benefit more need even sturn

#### 598 Thesis (3)

## 599 Independent Study (1-3)

# English Courses

For world literature in English translation see courses under Comparative Literature, and all the same lands and about a same

### 099 Developmental Writing (3)

An intensive course in basic writing skills. Designed to prepare students for English 101. Required of, and open only to, students who score below minimum standard on the English Placement Test (EPT). Degree credit is not awarded for this course. Instructional fee. (Same as Foreign Language Education 099)

#### 101 Beginning College Writing (3)

Prerequisite: English 099, a satisfactory score on the English Placement Test, or exemption from the EPT. An introductory course in the fundamentals of expository prose. Emphasizes grammatical and basic rhetorical concepts and practices necessary for successful college writing. Instructional fee. (CAN ENGL 2)

#### 103 Critical Reasoning and Writing (3)

Prerequisite: English 101 or the equivalent. An introduction to thinking skills as they relate to writing skills: constructing logical arguments, writing in conceptual patterns, detecting and avoiding fallacies. In section and analysings on 101 deligned interior of

#### 105 Introduction to Creative Writing (3)

Exploratory creative writing with the opportunity to write in various genres. No credit toward the major.

#### 106 Writing for ESL Students (3)

Prerequisite: consent of instructor. Fundamentals of written English for speakers of other languages. Emphasis on idiomatic usage and paragraph structure in written expression. May be repeated once for credit.

#### 110 Literature of the Western World from Ancient through Medieval Times (3) A seminate toleras to toleral est

Representative writers and works from the ancient through the medieval world. (Same as Comp Lit 110)

#### 111 Literature of the Western World from the Renaissance through the 19th Century (3)

Representative writers and works from the Renaissance through the 19th century. (Same as Comp Lit 111).

#### 199 Intensive Writing Review (3)

Prerequisite; consent of instructor. Restricted to students who have failed the EWP at least twice. Intensive review of the fundamentals of writing expository prose. Meets examination portion of baccalaureate writing requirement. Carries no credit toward graduation.

#### 200 Introduction to Literature (3)

An introduction to the study of fiction, drama and poetry. Concentration on the critical understanding of literary types rather than on their historical development. Carries no credit toward the major.

#### 201 Intermediate College Writing (3)

Recommended: English 101. Techniques of investigation, documentation and organization essential for writing academic papers: the research paper, reports, critiques, essay examinations. Instructional fee.

#### 202 The Short Story (3)

The structure and technique of the short story. Critical analysis of selected American and European short stories. (Same as Comp

### 203 Introduction to the Novel (3)

(Same as Comp Lit 203)

#### 204 Intermediate Creative Writing (3)

Recommended: Introduction to Creative Writing, consent of instructor. A course providing experience in creative writing beyond the introductory level. Emphasis on poetry, the short story, and/or the one-act play.

#### 205 Introduction to Drama (3)

Analysis of individual examples of dramatic literature. (Same as Comp Lit 205)

#### 206 Introduction to Poetry (3)

Analysis of the various kinds of English poems. (Same as Comp Lit 206) (CAN ENGL 20)

#### 257 Writing Haiku (1)

After a brief study of the development of haiku in Japan, students will write and revise haiku in English and share them with the class. With consent of instructor, may be repeated for no more than three units of credit. (Same as Comp Lit 257)

#### 300 Analysis of Literary Forms (3)

The main literary forms — prose fiction, poetry and drama — are studied and analyzed. English majors should schedule this basic course as early as possible. O sound storm daws soulon yard

#### 301 Advanced College Writing (3)

Prerequisite: English 101. An advanced course in writing expository prose. Emphasizes precision in rhetoric and development of individual style by concentration on matters of diction, audience, emphasis and persuasion. Required of English majors seeking a secondary credential. Instructional fee.

#### 303 The Structure of Modern English (3)

Prerequisite: junior standing. The grammar of contemporary English. Modern English usage. Required of English majors seeking a secondary credential. Must be taken before student teaching.

#### 305 The English Language in America (3)

American English, its origins, its regional and social dialects, and its role in American history and in such institutions as schools, corporations, government and the media. (Same as Linguistics 305)

#### 311 British Literature to 1760 (3)

Prerequisite: upper-division standing. Major periods and movements, major authors and major forms through 1760.

#### 312 British Literature from 1760 (3)

Prerequisite: upper-division standing. Major periods and movements, major authors and major forms from 1760 through modern times.

#### 315 Chaucer (3) (Formerly 333)

Prerequisite: English 101 or equivalent. The Canterbury Tales and Chaucer's language. The vocabulary, pronunciation, grammar and syntax of the East Midland dialect of Middle English.

#### 316 Shakespeare (3) (Formerly 334)

Prerequisite: English 101 or equivalent. A study of the major plays.

### 317 Milton (3) (Formerly 341)

Prerequisite: English 101 or equivalent. The poetry and prose in the light of Milton's intellectual development.

#### 320 Literature of the American Indians (3)

Prerequisite: upper-division standing. The prose and poetry of the North American Indian tribes.

#### 321 American Literature to Whitman (3)

Prerequisite: upper-division standing. Major writers such as Hawthorne, Poe, Melville, Emerson, Thoreau, Whitman, Dickinson.

#### 322 American Literature from Twain to the Moderns (3)

Prerequisite: upper-division standing. Major writers such as Twain, James, Crane, Hemingway, Faulkner, O'Neill, Frost, Eliot.

### 323T Cultural Pluralism in American Literature (3) (Formerly 353)

Prerequisite: junior or senior standing. The role of varied cultural groups in the USA as exemplified in American literature. Topics may include Jewish writers, Images of Immigrants, Asian-American writers, American Indian literatures, and others.

#### 325 American Ballad and Folksong (3)

Anglo-American balladry and folksong; their historical development, ethnic background and poetical values.

#### 326 The American Frontier in Literature (3)

Prerequisite: any courses in American literature, American studies or American history. Thematic study of American literature as it reflects the changing frontier experience and establishes national myths and symbols.

#### 355T Images of Women in Literature (3)

Prerequisite: junior or senior standing. Images of women in genres such as autobiography, poetry, drama, novel. Individual sections may treat conventional literary periods or specific cultures. May be repeated with different content for additional credit. (Same as Comp Lit 355T)

#### 356 The Literature of Aging (3)

Prerequisite: upper-division standing. Images of aging and old age in various genres (fiction, drama, poetry) drawn from Western and Non-western literatures. Topics include the social position of the aged, the challenge of middle and old age, aging parents, waning health and dying.

#### 360 Scientific and Technical Writing (3)

Open to science and non-science students. Scientific and professional writing and editing, with attention to outlines and abstracts, description, process explanation, instructions, and fundamentals of reports, feasibility studies, proposals, internal memos, and letters.

#### 365 Legal Writing (3)

Advanced compositions stressing logic, reasoning, and legal analysis.

#### 370 Horror Fiction (3) (Formerly 348)

Prerequisite: English 101 or equivalent. Horror/occult fiction (or "dark fantasy") from Mary Shelley to the present, including such writers as E. A. Poe, J. S. LeFanu, Bram Stoker, H. P. Lovecraft, Fritz Leiber and Stephen King.

#### 371 Fantasy Fiction (3) (Formerly 349)

Prerequisite: English 101 or equivalent. Fantasy in literature from Ariosto to Brautigan.

#### 372 Detective Fiction (3) (Formerly 350)

Prerequisite: English 101 or equivalent. Detective fiction from Edgar Allan Poe to the present, including writers such as Sayers, Christie, Chandler, Hammet and Ross MacDonald.

#### 373 Science Fiction (3) (Formerly 351)

Prerequisite: English 101 or equivalent. Science fiction as a literary genre, including future-scene fiction, the utopian novel, the superman/woman novel and short stories.

#### 381 African Literature (3) (Formerly 352)

Prerequisite: junior or senior standing. African literature written in the English language; the fiction, poetry and drama of the new nations. (Same as Comparative Literature 381 and Afro-Ethnic Studies 381)

#### 401 Exploration of Composing Theories (3)

Prerequisite: English 301 or equivalent. Writing processes explored through examination of one's own writing strategies and those of professional and student writers. Through interviews, observations, self-reflection, and readings in composition theory, students will answer the questions, What is writing? What is a writer?

#### 402 Theories of Response to Written Composition (2)

Prerequisite: English 301 and 303 or equivalents. Corequisite: English 402S. To teach, tutor, and conference with writers, one must understand writing processes: starting, sustaining, and revising; composing rhythms; individual idiosyncracies. Through observations, practice, and journals, students will learn various theories of responding to writers. For tutors and (prospective) teachers.

#### 402S Tutor Supervision (1)

Prerequisites: English 301 and English 303. Corequisite: English 402. Supervision of Writing Center tutors.

#### 404T Advanced Creative Writing (3)

Recommended: previous creative writing course(s) or equivalent. Instruction and practice in a workshop setting for the student with some experience in creative writing; emphasis on writing for professional markets. Consult the class schedule to determine instructor's emphasis. May be repeated for credit.

#### 408 Editing a Literary Journal (3) (Formerly 314)

Prerequisites: junior or senior standing. Experience in day-to-day running of a literary journal under guidance. Activities include helping to select from submissions, reject manuscripts, write and place ads, select type faces and art work, administer contests, work with printers and maintain files. May be repeated for up to six units of credit, with a limit of three units applicable toward the English major.

#### 416 Studies in Shakespeare (3) (Formerly 435)

Prerequisite: English 316 or consent of instructor. Problems of dramatic structure and artistic meanings.

#### 423 Early American Literature (3)

Prerequisite: English 321 or consent of instructor. The literature of colonial and revolutionary America, including the Puritans, 18th century deism and rationalism and the literary antecedents of American democratic thought.

#### 424 Introduction to Afro-American Literature (3) (Formerly 410) (Same as Afro 424) 177 nd quoto an omes) submo larrontible

# 433 Children's Literature (3)

Prerequisites: One of the following: English 110, 111, 200, 300, 311, 312, 321, 322, Comp Lit 324, 325, or an equivalent course. World literature written primarily for children, including material from the oral tradition, realistic fiction, fantasy and poetry.

#### 434 Literature for Junior and Senior High School (3)

Prerequisite: junior or senior standing. The evaluation, selection, and interpretation of fiction, non-fiction, drama and poetry reflecting the broad range of interest of young people from 12 to 17 years of age. (E) spiriture in Linguistics (3) TOBE

#### 440 History of the English Language (3) (Formerly 490)

Prerequisite: English 303 or equivalent. The historical development of English vocabulary, phonology, morphology and syntax from Indo-European to modern American English.

#### 441 Linguistics and Literature (3) (Formerly 354)

(Same as Linguistics 441)

#### 442 Changing Words: History, Semantics and Translation (3) (Formerly 436) (Same as Linguistics 442)

#### 450 Medieval Literature (3) (Formerly 332)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Readings in modern English translation from the medieval literature of England and the continent from St. Augustine to Sir Thomas Malory. (Same as Comparative Literature 450)

#### 451 Elizabethan and Jacobean Drama (3) (Formerly 335)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. The dramatic tradition in plays by such dramatists as Marlowe, Jonson, Webster, Beaumont and Fletcher.

#### 452 Elizabethan Poetry and Prose (3) (Formerly 336)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. The nondramatic literature of the English Renaissance.

#### 453 17th-Century Poetry and Prose (3) (Formerly 337)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Nondramatic literature of the period from 1603 to 1660 exclusive of Milton.

#### 454 The Drama of the Restoration & the 18th Century (3) (Formerly 338)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Representative plays of the Restoration and the 18th century. The development of such dramatic movements as the heroic play, Restoration comedy and sentimental drama.

#### 455 Restoration and 18th Century Poetry and Prose (3) (Formerly 340)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Major writers such as Butler, Rochester, Dryden, Pepys, Swift, Addison and Steele, Pope, Boswell, Johnson; selected minor writers.

#### 456 The Development of the English Novel through Jane Austen (3) (Formerly 345)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. The English novel from its beginnings to the 19th century; such novelists as Defoe, Richardson, Fielding, Sterne and Austen.

#### 457 The Romantic Movement in English Literature (3) (Formerly 343)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Major writers such as Burns, Blake, Wordsworth, Coleridge, Byron, Shelley and Keats.

#### 458 Victorian Literature (3) (Formerly 344)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Major writers such as Carlyle, Tennyson, Browning, Arnold, Ruskin and Pater.

#### 459 The Development of the 19th-Century English Novel (3) (Formerly 346)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Major novelists such as the Brontes, Thackeray, Dickens, Eliot and Hardy.

#### 462 Modern British and American Novels (3)

Prerequisite: survey of English, American or world literature; an upper-division literature course; or consent of instructor. Modern British and American novels from 1900 to 1950.

#### 463 Contemporary Novels in English (3)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. The novel in English since World War II.

#### 464 Modern British and American Drama (3)

Prerequisite: survey of English, American or world literature; an upper-division literature course; or consent of instructor. British and American drama from 1900 to 1950.

#### 465 Contemporary Drama in English (3)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Drama in English from 1950 to the present.

#### 466 Modern British and American Poetry (3)

Prerequisite: survey of English, American or world literature; an upper-division literature course; or consent of instructor. British and American poetry from 1900 to 1950.

#### 467 Contemporary Poetry In English (3)

Prerequisites: survey of English, American or world literature; an upper-division literature course; or equivalent. Poetry in English from 1950 to the present.

#### 491 Traditions of English Literary Criticism (3)

Prerequisite: English 300 or consent of instructor. The major English critics, from the Renaissance to the beginning of the 20th century, in relationship to the classical theories of criticism.

#### 492 Modern Critical Theory (3)

Prerequisite: English 300 or consent of instructor. The major movements in 20th-century British and American criticism.

#### 498 English Internship (3)

Prerequisites: junior or senior status and consent of faculty supervisor. Experience in the practical application of studies in literature and language to work outside the university. Hours to be specified; enrollment limited; C/NC; no credit toward major.

#### 499 Independent Study (1-3)

Prerequisite: junior or senior standing. Open to advanced students in English with consent of department chair. May be repeated for credit.

#### 500 Introduction to Graduate Studies in Literature (3)

Research techniques, analytical approaches and theories of literature. A course providing basic orientation in graduate literary studies.

#### 571T Graduate Seminar: Major Writers (3)

As appropriate to the specialized research and publication of instructor; major figures such as Shakespeare, Milton, Chaucer, Melville, Twain, Hawthorne, Joyce and Coleridge. May be repeated with different content for additional credit.

#### 572T Graduate Seminar: Literary Genres (3)

As appropriate to the specialized research and publication of instructor; major literary types such as the epic, the novel, the short story, lyric poetry, tragedy, comedy and historical drama. May be repeated with different content for additional credit. (Same as Comp Lit 572T)

#### 573T Graduate Seminar: Cultural Periods (3)

As appropriate to the specialized research and publication of instructor; the literature of a cultural period from Anglo-Saxon to modern times. May be repeated with different content for additional credit.

#### 574T Graduate Seminar: Special Problems in Literature (3)

As appropriate to the specialized research and publication of the instructor; special problems such as influences on literature, including philosophical, religious, scientific, geographic and other ecological viewpoints. May be repeated with different content for additional credit. (Same as Comp Lit 574T)

### 575T Graduate Seminar: Topics in High School Teaching (3)

Specific topics will vary from semester to semester. May be repeated with different content for additional credit.

#### 579T Graduate Seminar: Problems in Criticism (3)

Historical development and schools of criticism. Individual offerings within this course number may deal with only one aspect of critical problems. May be repeated with different content for additional credit. (Same as Comparative Literature 579T)

#### 580T Special Topics in Linguistics (3)

(Same as Linguistics 580T)

### 590 Writing Theory and Practice for Teaching Associates (3)

Prerequisite: English 402 and admission to the English Department Teaching Associate Program. Theory and practice of the composing process for the beginning college teacher of expository writing. Required of all English Department Teaching Associates during their first semester of teaching.

#### 590S Teaching Associate Supervision (1)

Prerequisite: English 590. Supervised teaching of developmental writing and freshman composition. No credit toward the M.A. in English. This course may be repeated for credit.

#### 597 Project (3)

Prerequisite: classified graduate standing. A research paper, a critical study, a portfolio of creative writings, or the results of fieldwork or experiment. Supervising professor and English department graduate studies committee must approve the proposal in advance of registration.

#### 599 Independent Graduate Research (3)

Research projects in areas of specialization beyond regularly offered course work. Oral and written reports. May be repeated with different content for additional credit.

### **English Education Courses**

#### 404 Microcomputers for English Teachers (3)

Prerequisites: Admission to the credential program or permission of the instructor. A hands-on computer course for secondary school English teachers. Focus is on the computer as a tool for English teachers and on classroom applications using computers to enhance instruction and improve writing and thinking skills.

#### 442 Teaching English in the Secondary School (3)

Prerequisite: admission to teacher education. Principles, methods and materials of teaching English in the secondary school.

### 449E Externship in Secondary Teaching (3)

Student teaching in the secondary school during the first semester of the teacher preparation program. The candidate plans and teaches assigned lessons during the last third of the semester.

#### 449I Internship in Secondary Teaching (10)

Student teaching in the secondary school during the second semester of the teacher preparation program. The candidate has the same instructional hours of responsibility as the master teacher.

### 4498 Seminar in Secondary Teaching (2)

One afternoon a week the candidate participates in a seminar with the university supervisor.

# Environmental Studies Program

Program Coordinator: Dennis Berg Associate Coordinator: Joel Weintraub Program Office: McCarthy Hall 103

Program Offered

Master of Science in Environmental Studies

Program Council

Gordon Bakken (History), Vincent Buck (Political Science), John Foster (Geological Science), Leroy Joesink-Mandeville (Anthropology), William Lloyd (Geography), Stewart Long (Economics), Michael Mend (Sociology), Dindial Ramasmooi (Civil Engineering), Michael Steiner (American Studies), Barry Thomas (Science Education), Dave Walkington (Fullerton Arboretum), Joel Weintraub (Biological Science), William Van Willis (Chemistry).

#### Advisers

Program: Dennis Berg

Environmental Sciences: Prem Saint

Environmental Policy and Planning: Gordon Bakken

Environmental Education & Communication: Barry Thomas

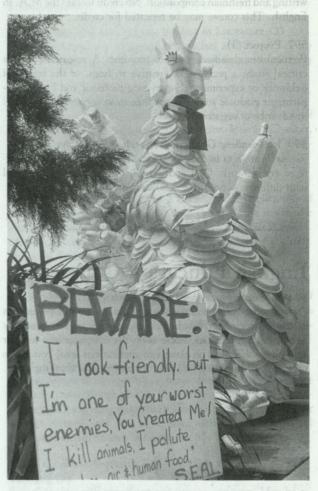
#### INTRODUCTION

Environmental Studies is an interdisciplinary program in human interaction with the environment — cultural as well as natural. Courses integrate knowledge and methods from several disciplines, all of which independently study special aspects of the environment. The program treats the social and cultural aspects of human attempts to exploit, modify and achieve balance with the environment. Curricula include concerns for ecological change, environmental pollution, technological solutions, balanced land utilization, and aspects of planning. The program prepares an individual student for work as a professional in the environmental field, and a student's thesis or project is the ultimate demonstration of his or her capacity to deal broadly with the environment.

Students select a course of study consistent with one of the following three areas of interest:

ENVIRONMENTAL SCIENCES: This area deals with the application of physical and biological science principles to environmental issues. Topical concerns include environmental ecology, water and air resources, environmental oceanography and geology. Students in this emphasis should have a strong background in biology, chemistry, earth science, engineering, geology or physics.

ENVIRONMENTAL POLICY AND PLANNING: This area deals with the concepts and method of the social and behavioral sciences as applied to environmental policy and planning. Topical concerns include urban and regional planning, environmental aspects of administration, design, behavior, perception, law and economics. Students in this area may have backgrounds in the social or behavioral sciences and the humanities.



#### ENVIRONMENTAL EDUCATION AND COMMUNICATION:

This emphasis approaches the study of the environment through such related disciplines as communication, biology, earth science and geography. Students require skills of observation, analysis and presentation appropriate for the classroom teacher, the outdoor naturalist or communication specialist. Students in this emphasis area should have a background in natural science, education or communications.

#### MASTER OF SCIENCE IN **ENVIRONMENTAL STUDIES**

#### Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of 3.0 in the last 60 units of course work attempted. In addition, three letters of recommendation are required.

An undergraduate course in ecology and one in statistics are prerequisites for admission. Students without these prerequisites may be admitted provisionally but must take these courses prior to or concurrent with their enrollment in study plan course work.

#### Graduate Standing: Classified

After completion of no more than nine semester units of adviserapproved course work and the development of an approved study plan, the student should apply for classified standing.

#### Study Plan

The M.S. in Environmental Studies requires the completion of 36 units of adviser-approved course work with a GPA of 3.0 or better and a thesis or project. The student's thesis committee should be comprised of three members, representing at least two different fields, with one being a member of the Environmental Studies Council. A student's project is supervised by a single faculty member.

#### Environmental Studies Core (9 units)

- 500 Environmental Issues and Approaches (3)
- 510 Environmental Evaluation and Protection (3)
- 520 Social Environmental Analysis (3)

A student who can demonstrate competency in any core course subject matter may, with the permission of the graduate program adviser, substitute a suitable three-unit course.

Environmental Studies Electives (6-12 units)

#### Choose from:

- 595 Selected Topics in Environmental Problems (3)
- 596 Internship in Environmental Studies (3)
- 599 Independent Graduate Research (3)

#### Cross-Disciplinary Electives Work (12-18 units)

Courses outside Environmental Studies are chosen with prior approval of the faculty adviser and consistent with the student's area of interest.

#### Thesis 598 or Project 597 (3 units)

For further information, consult the graduate program adviser.

### Environmental Studies Courses

#### 500 Environmental Issues and Approaches (3)

Prerequisite: graduate standing in Environmental Studies or consent of instructor. Discussions of interdisciplinary approaches to environmental problems and research methods. Students prepare seminars and papers on research design for potential thesis topics. Meets graduate writing requirement.

#### 510 Environmental Evaluation and Protection (3)

Prerequisites: graduate standing in environmental studies or consent of instructor. Environmental parameters (water, air, solid wastes, noise, radiation, etc.). Techniques in monitoring and measurement; effect on human health; environmental quality standards and controls. Demonstrations and field trips.

#### 520 Social Environmental Analysis (3)

Prerequisites: graduate standing in environmental studies or consent of instructor. Concepts and methods used by social and behavioral scientists to analyze the built environment, and behavior within environment settings. Such topics as environmental perception, design-behavior research, social impacts, law, growth management, environmental health and research on hazards.

#### 595 Selected Topics in Environmental Problems (3)

Prerequisite: graduate standing in environmental studies or consent of instructor. Various environmental topics, contemporary or historic, that focus on problems (e.g., law, impact assessment, planning, etc.) Topic chosen and outline will be circulated prior to registration. Each topic may only be completed once.

#### 596 Internship in Environmental Studies (3)

Prerequisite: graduate standing in environmental studies or consent of instructor. Field experience with a governmental or private agency. Seminars and professional experience.

#### 597 Project (1-3)

Prerequisites: permission of advisor. May be repeated for credit.

#### 598 Thesis (3)

Prerequisites: classified status in environmental studies program and consent of instructor. Planning, preparation and completion of an acceptable, interdisciplinary thesis. Credit on submission of thesis.

#### 599 Independent Graduate Research (1-3)

Prerequisite: graduate standing and consent of instructor and program coordinator. May not be repeated for credit.

# Department of Foreign Languages and Literatures

Department Chair: Curtis W. Swanson Department Office: Humanities 835C Language Laboratory: Humanities 325

Programs Offered
Bachelor of Arts in French
Minor in French
Master of Arts in French
Bachelor of Arts in German
Minor in German

Bachelor of Arts in Spanish

Minor in Spanish

Master of Arts in Spanish

Master of Arts in German

Bachelor of Arts in Japanese

Minor in Japanese Minor in Portuguese

Master of Science in Education (Teaching English to Speakers of Other Languages)

Certificate in Teaching English to Speakers of Other Languages

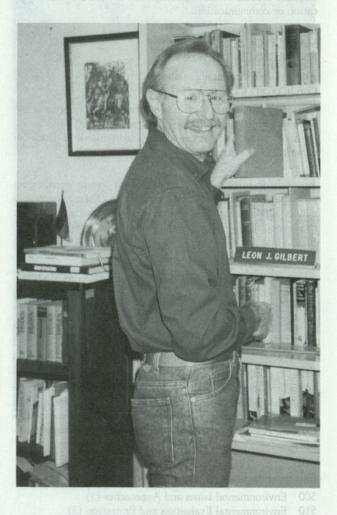
In cooperation with the School of Business Administration and Economics the Bachelor of Arts in International Business with a concentration in French, German, Japanese, Portuguese or Spanish

#### Faculty see the set has been and also were pigot rost and

Linda Andersen, Oswaldo Arana, Nancy Baden, Samuel Cartledge, Modesto Dìaz, Hélène Domon, Michèle Druon, Janet Eyring, Leon Gilbert, Ronald Harmon, Josefina Hess, Arturo Jasso, Jacqueline Kiraithe-Cordova, Keiji Matsumoto, George Peale, Ervie Peña, Marcial Prado, Charles Shapley, Nobuko Sugamoto, Curtis Swanson, Marjorie Tussing, Eva Van Ginneken, Jon Zimmermann

#### INTRODUCTION CONTROL OF THE PROPERTY OF THE PR

The Department of Foreign Languages and Literatures offers a wide diversity of programs of language study, aimed at meeting the varying needs of today's students.



A student who can demonstrate coreperency in any core course subject matter may, with the perchission of the graduate program adviser, substitute a suitable three unit course.

Environmental Studies Electroes (0-12 units)
Choose from:

595 Selected Topics in Environmental Pro 596 Internship in Environmental Studies 599 Independent Circlaste Research (3) In our rapidly changing world, it is imperative that we lower the barriers that impede understanding. Communicating effectively in a foreign language is not, however, simply an exercise in the acquisition of linguistic skills. In learning another language we also gain insight into the thinking of another culture (often very different from our own), insights which afford us the perspective necessary to examine critically our own cultural values. In our department we view language, culture and literature as integrally-related facets of the complex phenomenon of communication which help us to better understand each other and our roles in the ever-changing process of civilization.

Our department has well-established baccalaureate and master's programs in French, German and Spanish. Additionally, we offer a postbaccalaureate program leading to a Certificate in Teaching English as a Second Language and an M.S. in Teaching English to Speakers of Other Languages (TESOL). Beyond our degree and certificate programs we offer minors in French, German, Japanese, Spanish and Portuguese. Lower-division programs are available in Chinese (Mandarin), Greek (Koine), Hebrew, Italian, Latin, and Russian. Other languages, such as Arabic and Vietnamese, may be offered when there is sufficient student demand.

Majors and/or minors in Foreign Languages and Literatures are designed for students who are planning a teaching career at the elementary or secondary level, those wishing to pursue more advanced studies in the language and literature of their field, or the growing number of individuals who will find foreign language ability and sensitivity to other cultures an increasingly important adjunct career skill. Such individuals will include students planning careers in social services, the foreign service, translation services, literary fields, international finance and banking and the rapidly expanding world of international business. Our goal is to assist students in perfecting their foreign language skills (all courses except Greek and Latin are taught in the target language), to deepen their knowledge about language and the humanities by reading representative authors in its literature, and to familiarize them with the cultural tradition of the people whose language they are studying.

#### CREDENTIAL INFORMATION

French, German and Spanish offer waiver programs approved by the State of California for the Ryan Single Subject Credential.

Students interested in applying to a teacher education credential or a certificate program must consult with a teacher education adviser for a preliminary program review in the semester prior to application to the program. Information concerning the programs is available from Teacher Education.

Before being admitted to a credential program, all prospective teachers may be asked to pass a proficiency examination in which their skills of listening, speaking, reading, writing, knowledge of linguistic principles as well as the target culture will be tested. Students should inquire at the department office for current information.

#### SPECIAL PROGRAM INFORMATION

#### Language Concentration for International Business

The Department of Foreign Languages and Literatures offers a language concentration in French, German, Japanese, Portuguese, and Spanish for the International Business major consisting of 12 units of upper-division language study. For description of the international business program, please see School of Business Administration in this catalog.

#### International Programs

In accordance with recommendations made by the Modern Language Association of America, the Department of Foreign Languages and Literatures encourages students to participate in a study-abroad program. Such programs facilitate student mastery of the language and will afford additional insights into the foreign culture. The California State University's International Programs offers a wide variety of study opportunities on the junior, senior and graduate level. Exchange programs are also available with the University of Paris (France), the Autonomous University of Guadalajara (Mexico), the University of Nanzan (Japan), and the Moscow Institute for Steel and Alloys (Russia).

Language majors are required to complete the following minimum of courses on campus before departure for, or upon return from, overseas:

- A. for the B.A.: 12 units of upper-division courses consisting of a minimum of six units at the 400 level in the major
- B. for the M.A.: 15 units consisting of a minimum of 12 units at the 500 level in the area of specialization.

### THE CSU/UCLA COOPERATIVE PROGRAM IN FOREIGN LANGUAGES AND LITERATURES

The Cooperative Program in Foreign Languages and Literatures gives students the opportunity, without additional fees, to take courses in foreign languages not available on this campus or any neighboring CSU campus but offered at UCLA. For information regarding enrollment and qualifications, interested students should inquire at the department office.

#### The Language Laboratory

Students enrolling in lower division courses are required, in addition to the regular class periods, to practice in the language laboratory. The 36-station laboratory operates like a library; students may use it at a time most convenient to them, preferably every day in sessions of 15 to 30 minutes. Further details will be announced by each instructor and by the supervisor of the language laboratory.

#### Advisers amma a noque but and we summer analysis division requirements we are the summer and a summer a summer and a summer a summer and a summer a summer and a summer and a

Undergraduate: All faculty members serve as advisers. Students may check at the department office to determine which faculty member has been assigned.

Foreign Language Teacher Education and TESOL: Nancy Baden, Samuel Cartledge, Janet Eyring, Ronald Harmon, Jacqueline Kiraithe-Cordova, Nobuko Sugamoto, Marjorie Tussing, Jon Zimmermann.

Graduate: Charles Shapley (M.A. in French), Marjorie Tussing (M.A. in German), Marcial Prado (M.A. in Spanish), Nancy Baden (M.S. in Education TESOL).

#### Placement

Students should enroll at that point in the sequence of courses for which their previous study and/or experience prepares them. Students with no language background should enroll in fundamental 101-level courses. Normally, two years of high school language study are counted as one year of college language. Students just completing two years of high school language should begin at 200-level intermediate courses. A minimum of four years of high school language, or its equivalent, is considered a prerequisite for more advanced 300-level major work.

Courses at the 101-level are not open to students who have completed two or more years of high school study or one term of college study in that language, unless such study was completed three years or more before entering the class. Courses at the 102-level are not open to students who have completed two or more years of high school study or two terms of college study in that language, unless such study was completed three years or more before entering the class.

Due to the sequential nature of language instruction, consultation with an adviser in the Department of Foreign Languages and Literatures is strongly recommended before enrolling.

#### International Baccalaureate Program

Students entering the university with the International Baccalaureate will be given an oral interview with two instructors of the target language. Subject to their recommendation, the following policy will be in effect:

Students with the International Baccalaureate Higher Level Language B Exam with a grade of four or better will have lower division requirements waived and — upon recommendation — will receive three to twelve units of upper division language credit.

Students with the International Baccalaureate Subsidiary Level Language B Exam with a grade of four or better will have lower division requirements waived and — upon recommendation — will receive up to six units of upper division language credit. If no upper division units are recommended, a minimum of six units of 200-level credit will be awarded.

#### Transfer Students

In accordance with university rules, all transfer students must complete 30 units in residence at Cal State Fullerton. Of these 30 units, the transfer student majoring in French, German or Spanish is required to complete 12 upper-division units, i.e., 300, 400 or 500-level courses, including 9 units of 400-levels classes in the major on the Cal State Fullerton campus. The specific courses will be determined in consultation with the student's adviser and approved by the chair.

#### Upper-Division Writing Requirement

English 301 satisfies the course portion of the upper-division writing requirement for all foreign language majors.

#### BACHELOR OF ARTS IN FRENCH

Basic Requirements (20 units)

Each of the following courses or their equivalent:

French 101	Fundamental	French-A (5)
F 1 100	F 1 1	F 1 D (5)

French 102 Fundamental French-B (5)

French 203 Intermediate French-A (3)
French 204 Intermediate French-B (3)

French 213 Intermediate Diction and Phonetics (2)

French 214 Intermediate Conversation and Composition (2)

### Upper-Division Requirements (a total of 33 upper-division units) (21 units required as listed below)

English 301 Advanced College Writing (3)

French 307 Advanced Composition and Grammar (3)

or French 308 Advanced Composition and Grammar (3)

French 315 Origins of Modern France (3)

French 325 Contemporary French Civilization (3)

French 375 Introduction to Literature (3)

French 415 French Classicism (3)

French 425 French Romanticism (3)

Plus in consultation with an adviser, choose two from the following Seminars in 20th Century French Literature:
(6 units required)

French 475A Exploration of the Self (3)

French 475B In Search of the Real (3)

French 475C The Individual and Society (3)

French 475D Literature and Anti-Literature (3)

Plus in consultation with an adviser, choose two from the following electives: (6 units required)

French 300 French Conversation (3)

French 307 Advanced Composition and Grammar (3) or French 308 Advanced Composition and

Grammar (3)

French 310 French in the Business World (3) T

French 311 French for International Business (3) French 385 Techniques of French-English Translation (3) whose starts to assume a given by sale to does

French 407 French Film (3)

French 466 Introduction to French Linguistics (3)

French 475A,B,C,D Seminar in 20th Century Literature (3,3,3,3) 3) (7) A seemed suchement 100 seem

French 485T Senior Seminar in French Literature (3)

#### MINOR IN FRENCH

### Basic Requirements (20 units)

Each of the following courses or their equivalent.

French 101 Fundamental French-A (5)

French 102 Fundamental French-B (5)

French 203 Intermediate French-A (3)

French 204 Intermediate French-B (3)

French 213 Intermediate Diction and Phonetics (2)

French 214 Intermediate Conversation and Composition or equivalent (2) 18 more representation and the second of th

### Upper-Division Requirements (a total of 12 units) (6 units required from these courses)

French 307 Advanced Composition and Grammar (3) or French 308 Advanced Composition and Grammar (3) of the second of t

French 315 Origins of Modern France (3)

or French 325 Contemporary French Civilization (3)

Plus in consultation with an adviser, choose two additional courses from the following: (6 units required)

French 300 French Conversation (3)

French 307 Advanced Composition and Grammar (3)

or French 308 Advanced Composition and Grammar (3)

French 310 French in the Business World (3)

French 311 French for International Business (3)

French 315 Origins of Modern France (3)

or French 325 Contemporary French Civilization (3)

French 375 Introduction to Literature (3)

French 385 Techniques of French-English

French 407 French Film (3)

French 415 French Classicism (3)

French 425 French Romanticism (3) French 466 Introduction to French Linguistics (3)

French 475A Exploration of the Self (3)

French 475B In Search of the Real (3)

French 475C The Individual and Society (3)

Literature and Anti-Literature (3) French 475D

French 485T Senior Seminar in French Literature (3)

#### BACHELOR OF ARTS IN GERMAN

#### Basic Requirements (20 units)

Each of the following courses or their equivalent.

German 101 Fundamental German-A (5)

German 102 Fundamental German-B (5)

German 203 Intermediate German-A (3)

German 204 Intermediate German-B (3)

German 213 Intermediate Reading-A (2)

German 214 Intermediate Reading-B (2)

#### Upper-Division Requirements (a total of 33 upper-division units) (18 units required as listed below)

English 301 Advanced College Writing (3)

German 305 Advanced Conversation and

Composition (3)

German 315 Introduction to German Civilization (3)

German 325 Current Trends in Culture of German-

Speaking Peoples (3)

German 335 Introduction to Literature (3)

German 399 German Phonetics (3)

Plus in consultation with an adviser, choose three of the following literature courses (9 units required):

German 430 German Literature and Culture to the Baroque (3)

German 440 18th-Century German Literature and

Culture (3) German 450 19th-Century German Literature and

Culture (3) German 460 20th-Century German Literature and

Culture (3) German 482 German Literature & Culture in Film (3)

Plus in consultation with an adviser, choose two courses from the following (6 units required):

German 300 German Conversation (3)

German 310 German in the Business World (3)

German 311 German for International Business (3)

German 401 Advanced Conversation Practice and Vocabulary Expansion (3)

German 466 Introduction to German Linguistics (3)

German 485T Senior Seminar in German Literature (3)

#### MINOR IN GERMAN

### Basic Requirements (20 units)

Each of the following courses or their equivalent.

German 101 Fundamental German-A (5)

German 102 Fundamental German-B (5)

German 203 Intermediate German-A (3)

German 204 Intermediate German-B (3)

German 213 Intermediate Reading-A (2)

German 214 Intermediate Reading-B (2)

#### Upper-Division Requirements (12 units) (6 units required from this section)

German 305 Advanced Conversation & Composition (3) German 315 Introduction to German Civilization (3) or German 325 Current Trends in Culture of German Speaking Peoples (3)

Plus in consultation with an adviser, choose two additional courses from the following (6 units required):

German	300	German	Conversation	(3)
German	200	German	Conversation	())

German 310 German in the Business World (3)

German for International Business (3) German 311

German 315 Introduction to German Civilization (3)

German 325 Current Trends in Culture of German-Speaking

Peoples (3)

Introduction to Literature (3) German 375

German 399 German Phonetics (3)

German 401 Advanced Conversation Practice and

Vocabulary Expansion (3)

#### BACHELOR OF ARTS IN JAPANESE

#### Basic Requirements (20 units)

Each of the following courses or their equivalent.

lapanese	101	Fundar	mental	Japanese-A	(5)

Japanese 102 Fundamental Japanese-B (5)

Japanese 203 Intermediate Japanese-A (5)

Intermediate Japanese-B (5) Japanese 204

#### Upper Division Core Requirements (18 units) from among the following courses

Japanese 305 Advanced Japanese-A (3)

Japanese 306 Advanced Japanese-B (3)

Japanese 307 Advanced Spoken Japanese (3)

Advanced Written Japanese (3) Japanese 308 Japanese 310 Japanese for Business (3)

Japanese 311 Japanese for International Business (3)

Japanese 315 Introduction to Japanese Civilization (3)

Japanese 316 Modern Japan (3)

#### Upper Division Electives (12 units) from among the following:

Japanese 375 Introduction to Literary Forms (3)

Japanese 410 Classical Japanese (3)

Japanese 430 Introduction to Japanese Classic Literature (3)

Japanese 440 Introduction to Modern Japanese Literature (3)

Japanese 466 Introduction to Japanese Linguistics (3)

Japanese 468 Japanese-English Contrastive Analysis (3)

Japanese 485T Variable Topics in Japanese (3)

Japanese 499 Independent Study (1-3)

### French 311 French for loss marging 323 APA III NORIM

#### Basic Requirements (20 units)

Each of the following courses or their equivalent.

Japanese 101 Fundamental Japanese-A (5)

Japanese 102 Fundamental Japanese-B (5)

Intermediate Japanese-A (5) Japanese 203

Japanese 204 Intermediate Japanese-B (5)

#### Upper-Division Requirements (12 units)

Six units required from the following:

Japanese 305 Advanced Japanese-A (3)

Japanese 306 Advanced Japanese-B (3)

Japanese 307 Advanced Spoken Japanese-A (3)

Japanese 308 Advanced Written Japanese-B (3) 301 Abnor

and six units from among the following: 405 documents

Japanese 310 Japanese for Business (3)

Japanese 311 Japanese for International Business (3)

Japanese 315 Introduction to Japanese Civilization (3)

Japanese 316 Modern Japan (3)

Japanese 375 Introduction to Literary Forms (3)

Japanese 410 Classical Japanese (3)

Japanese 430 Introduction to Japanese Classic Literature (3)

Introduction to Modern Japanese Literature (3) Japanese 440

Japanese 466 Introduction to Japanese Linguistics (3)

Japanese 468 Japanese-English Contrastive Analysis (3)

Independent Study (1-3) Japanese 499

### BACHELOR OF ARTS IN SPANISH

#### Basic Requirements (21 units)

Each of the following courses or their equivalent.

Fundamental Spanish-A (5) Spanish 101

Fundamental Spanish-B (5) Spanish 102

Intermediate Spanish-A (3) Spanish 203

Intermediate Spanish-B (3) Spanish 204

Intermediate Conversation (2) Spanish 213

Intermediate Composition (3) Spanish 214

#### Upper-Division Requirements (33 units)

Literature Emphasis

English 301 Advanced College Writing (3) (5) nonsknister

Spanish 301 Advanced Conversation and

Composition (3)

Spanish 315 Introduction to Spanish Civilization (3)

Spanish 316 Introduction to Spanish-American

Civilization (3)

Spanish 375 Introduction to Literary Forms (3)

Spanish 400 Spanish for Advanced Students and

Teachers (3)

Spanish 430 Spanish Literature to Neoclassicism (3) or Spanish 461 Spanish Literature Since Neoclassicism (3)

Spanish 441 Spanish-American Literature (3)

Spanish 466 Introduction to Spanish Linguistics (3)

Spanish 467 Dialectology: Current Trends in Modern Spanish (3)

or Spanish 468 Spanish-English Contrastive Analysis (3)

Plus in consultation with an adviser, choose one from the following electives:

Spanish 300 Spanish Conversation (3)

Spanish 415 Contemporary Spanish Culture (3)

Spanish 416 Contemporary Spanish-American English 440 History of the English Land

Culture (3)

Spanish 430 Spanish Literature to Neoclassicism (3)

Spanish Literature Since Spanish 461

Neoclassicism (3)

Spanish 475T Senior Seminar: Topics in Spanish Peninsular Literature (3)

Spanish 485T Senior Seminar: Topics in Spanish-American Literature (3)

Linguistics Emphasis (33 units required)

English 301 Advanced College Writing (3)

Spanish 301 Advanced Conversation and

Composition (3)

Spanish 315 Introduction to Spanish Civilization (3)

Spanish 316 Introduction to Spanish-American

Civilization (3)

Spanish 375 Introduction to Literary Forms (3)

Spanish 400 Spanish for Advanced Students and

Teachers (3)

Spanish 466 Introduction to Spanish Linguistics (3)

Spanish 467 Dialectology: Current Trends in Modern

Spanish (3)

Spanish 468 Spanish-English Contrastive Analysis (3)

Plus in consultation with an adviser, choose two (one of which must be literature) from the following electives:

Spanish 300 Spanish Conversation (3)

Contemporary Spanish Culture (3) Spanish 415

Contemporary Spanish-American Culture (3) Spanish 416

Spanish 430 Spanish Literature to Neoclassicism (3)

Spanish-American Literature (3) Spanish 441

Spanish Literature Since Spanish 461

Neoclassicism (3)

Spanish 475T Senior Seminar: Topics in Spanish Peninsular Literature (3)

Spanish 485T Senior Seminar: Topics in Spanish-American Literature (3)

### MINOR IN SPANISH

#### Basic Requirements (21 units)

Each of the following courses or their equivalent.

Fundamental Spanish-A (5) Spanish 101

Spanish 102 Fundamental Spanish-B (5)

Spanish 203 Intermediate Spanish-A (3) (8) months [10]

Spanish 204 Intermediate Spanish-B (3)

Spanish 213 Intermediate Conversation (2)

Spanish 214 Intermediate Composition (3)

#### Upper-Division Requirements (12 units)

Six units required from the following. Certificate for Teachers of English as a

Spanish 301 Advanced Conversation and Composition (3)

Spanish 315 Introduction to Spanish Civilization (3) or Spanish 316 Introduction to Spanish-American with their degree objective. Civilization (3)

Plus in consultation with an adviser, choose two additional upper-division courses from the following:

Spanish 300 Spanish Conversation (3)

Introduction to Literary Forms (3) Spanish 375

Spanish 400 Spanish for Advanced Students and Teachers (3)

Contemporary Spanish Culture (3) Spanish 415

Spanish 416 Contemporary Spanish-American Culture (3)

Spanish 430 Spanish Literature to Neoclassiciam (3)

Spanish-American Literature (3) Spanish 441

Spanish 466 Introduction to Spanish Linguistics (3)

Spanish 467 Dialectology: Current Trends in Modern Spanish (3)

Spanish 468 Spanish-English Contrastive Analysis (3)

Spanish 475T Senior Seminar: Topics in Spanish Peninsular Literature (3)

Spanish 485T Senior Seminar: Topics in Spanish-American Literature (3)

#### MINOR IN PORTUGUESE

### Basic Requirements (8 units)

Each of the following courses or their equivalent.

Portuguese 101 Fundamental Portuguese-A (4)

Portuguese 102 Fundamental Portuguese-B (4)

#### Upper-Division Requirements (12 units)

Portuguese 310 Portuguese on the Business World (3) or Portuguese 317 Advanced Conversation and Composition (3)

Portuguese 320 Introduction to Luso-Brazilian Culture and Civilization (3)

or Portuguese 325 Contemporary Brazilian Civilization (3)

Plus in consultation with an adviser, choose two additional courses from the following:

Portuguese 310 Portuguese in the Business World (3) or Portuguese 317 Advanced Conversation and Composition (3)

Portuguese 320 Introduction to Luso-Brazilian Culture and Civilization (3)

Portuguese 325 Contemporary Brazilian Civilization (3)

# CERTIFICATE FOR TEACHERS OF ENGLISH AS A SECOND LANGUAGE

In cooperation with the Departments of English and Linguistics, the Department of Foreign Languages and Literatures offers a Certificate for Teachers of English as a Second Language (TESOL). The program consists of 24 units, some of which (with consent of the admitting committee) may be taken during the candidate's undergraduate study. In order to participate in the program, students must declare the TESOL Certificate along with their degree objective.

### Admission Requirements and the state of the

- Senior standing or admission to either postbaccalaureate or graduate standing.
- 2. Overall GPA of 2.5 (minimal) and 3.0 in the major.
- 3. Completion of English 301 and 303 with grades of B or better.
- 4. At least two years of one foreign language or one year each of two different languages or the equivalent. This requirement will normally be waived for students from foreign countries who have studied English as a foreign language.
- 5. An interview to determine oral proficiency in English at the time of application.
- 6. Consent of the admitting committee to enter the program and to develop a study plan.

#### Required Core Courses

Contrastive Analysis — one of the following: 100 A 100 AM

Japanese 468 Japanese-English Contrastive Analysis (3)

or Spanish 468 Spanish-English Contrastive Analysis (3)

or Foreign Language Education 468 TESOL

Contrastive Analysis (3)

#### Methods

(It is highly recommended that French, Spanish, German, Japanese 466 or Linguistics 406 be taken prior to 443A and B.)

Fl-Ed 443A Principles of Teaching
English to Speakers of Other Languages (3)
Fl-Ed 443B Principles of Teaching
English to Speakers of Other Languages (3)

Practicum — one of the following:

Fl-Ed 596 TESOL Practicum (3)

To be taken at the end of the program. Students must consult with an adviser the semester before the practicum.

Prerequisites are Foreign Language Education 443A, 443B, Spanish 468 or Foreign Language Education 468.

All core courses must be completed with a grade of B or better to undertake fieldwork.

#### Electives (12 units required)

(To be completed from each of the following areas of concentration)

English elective (3 units)

English 305 The English Language in America (3) Adams English 440 History of the English Language (3)

Foreign Language elective (3 units) and damage 104 damage

Spanish 466 Introduction to Spanish Linguistics (3)
French 466 Introduction to French Linguistics (3)
German 466 Introduction to German Linguistics (3)
Japanese 466 Introduction to Japanese Linguistics (3)
Spanish 467 Dialectology: Current Trends in Modern
Spanish (3)

Fl-Ed 527 Theory of Bilingual Language Acquisition (3)

or an adviser-approved substitute for those who do

not have sufficient foreign language prerequisites or whose
foreign language is English

Linguistics elective (3 units)

Linguistics 307 Speech Language Development (3)
Linguistics 351 Introduction to Linguistic Phonetics and Phonology (3)

Linguistics 406 Descriptive Linguistics (3)
Linguistics 505 Phonological Analysis (3)
Linguistics 507 Grammatical Analysis (3)
Linguistics 508 Theories of Syntax (3)

Other electives (3 units)

A 400- or 500-level course in one of the elective areas, or student may choose one elective from any of the following: American studies, American literature, American governmental institutions, anthropology, speech communication or other applicable courses in foreign languages and linguistics with the certificate adviser's approval.

#### MASTER OF ARTS IN FRENCH

#### Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. See the section of this catalog on admission of graduates for the complete statement and procedures.

## Graduate Standing: Classified

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements may be granted classified graduate standing upon the development of an approved study plan: a major in French consisting of 24 units (or equivalent) of upper-division studies with above-average scholarship. (A candidate presenting a B.A. which has fewer than 24 upper-division units in the language, or is otherwise inadequate, will be required to take additional courses to build a full undergraduate major before beginning the graduate program.) The student must also demonstrate proficiency in English, either by examination or a three-unit upper-division course in English grammar.

Adaptations of certain admission requirements may be made for promising foreign students.

# The study plan consists of Study Plan

The study plan consists of 30 units of graduate study (at least 15 in 500-level courses), distributed as follows:

Core Course (3 units)

French 500 Graduate Seminar: Advanced Structure and Style (3)

Linguistics Seminar (3 units)

French 520 Graduate Seminar: Old French (3) or French 530 Graduate Seminar: Historical Linguistics (3)

Literature seminars chosen from the following (9 units)

French 557 Graduate Seminar: French Poetry (3)

French 571 Graduate Seminar: French Prose (3)

French 575 Graduate Seminar: French Drama (3)

French 576T Graduate Seminar: Major Writers (3)

Additional electives to be chosen in consultation with the graduate adviser (15 units) (A maximum of six units may be taken, with approval of the adviser, in a related field, at the 300-400- or 500level.)

French 407 French Film (3)

French 466 Introduction to French Linguistics (3)

French 475A Exploration of the Self (3)
French 475B In Search of the Real (3)

French 475C The Individual and Society (3)

Literature and Anti-Literature (3) French 475D

Senior Seminar in French Literature (3) French 485T

French 520 Graduate Seminar: Old French (3)

French 530 Grad Seminar: Historical Linguistics (3)

French 557 Grad Seminar: French Poetry (3)

French 571 Grad Seminar: French Prose (3)

French 575 Grad Seminar: French Drama (3)

French 576T Grad Seminar: Major Writers (3)

French 598 Thesis (3-6)

French 599 Independent Graduate Research (1-3)

In addition, a candidate must complete a: (1) Bibliographic Project, and (2) Reading Project. Final evaluation is by a comprehensive written and oral examination, including fluency in the French language. The candidate may, with the approval of the graduate committee, repeat the examination, but once only, within two years.

For further information, consult the Department of Foreign Languages and Literatures. I memo of the common of the common

### MASTER OF ARTS IN GERMAN

### Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. See the section of this catalog on admission of graduates for the complete statement and procedures.

# Graduate Standing: Classified

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements, may be granted classified graduate standing upon the development of an approved study plan: a major in German consisting of 30 units (or equivalent) of upper-division studies with above-average scholarship. (A candidate presenting a B.A. which has fewer than 30 upper-division units in the language, or whose background is otherwise inadequate, normally will be required to take additional courses to build a full undergraduate major before beginning the graduate program.) The student must also demonstrate proficiency in English, either by examination or a threeunit upper-division course in English grammar. Adaptations of certain admission requirements may be made for promising foreign students.

#### Study Plan

The study plan requires 30 units of graduate study (at least 15 in 500-level courses), distributed as follows:

Core Courses (6 units)

German 500 Graduate Seminar: Advanced Structure and Style (3)

German 530 Graduate Seminar: Historical Linguistics (3)

Graduate Seminars in Literature (9-12 units)

German 571T\* Graduate Seminar: German 400 muminim

Literature (3) 2 annual Stevel-004 havoreers to stimulate we

German 576T\* Graduate Sem: Major Writers (3)

<sup>\*</sup>Variable topic course may be taken again for credit.

Other Electives (if not taken as an undergraduate) (12-15 units) (12-15 units)

German 430 German Literature and Culture to the Baroque (3)

German 440 18th-Century German Literature and Culture (3)

German 450 19th-Century German Literature and Culture (3)

German 460 20th-Century German Literature and Culture (3)

German 482 German Literature and Culture in Film (3)

German 485T\* Senior Seminar in German Literature (3)

German 598 Thesis (3-6)

German 598 Thesis (3-6)

German 599 Independent Graduate Research (1-3)

With the approval of the graduate committee, a student may substitute a thesis for some of the units required under "Other Electives." A reading list must be completed by all students. Final evaluation is by a comprehensive written and oral examination, including fluency in the German language. The candidate may, with the approval of the graduate committee, repeat the examination, but once only, within two years.

For further information, consult the Department of Foreign Languages and Literatures.

# MASTER OF ARTS IN SPANISH

#### Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. See the section of this catalog on admission of graduates for the complete statement and procedures.

Candidates will need a B.A. in Spanish consisting of at least 24 units (or equivalent) of upper-division studies with above average scholarship. (A candidate presenting a bachelor of arts which has fewer than 24 upper-division units in the language, or whose background is otherwise inadequate, will be required to take additional courses to build a full undergraduate major before beginning the graduate program.) The student must also demonstrate proficiency in English, either by examination or a threeunit upper-division course in English grammar.

Students selecting the Bilingual Studies option may have a B.A. in a related field with at least 18 units of upper-division Spanish with a minimum GPA of 3.0, AND one of the following:

six additional units of 400-level Spanish courses with a minimum GPA of 3.0;

or six units of approved 400-level Chicano Studies or Latin American Studies courses with a minimum GPA of 3.0;

or successful completion of placement examination testing knowledge of Hispanic literature, language and culture.

Satisfactory evaluation of language proficiency by committee is also required. Adaptations of certain admission requirements may be made for promising foreign students. scholarship.84A, candidate preso

# Graduate Standing Classified and Aller and All

A student who meets the requirements for conditionally classified graduate standing is eligible for classified graduate standing upon the development of an approved study plan, which should be done in consultation with the graduate advisor prior to the completion of nine graduate units.

#### Study Plan

The study plan consists of 30 units of graduate study (at least 15 in 500-level courses), distributed as follows:

Adaptations of certain admission requirements

#### Spanish: Standard Plan and benefit of the course of the standard Plan and benefit of the standard Plan and the

Core Courses (6 units)

Spanish 500 Graduate Seminar: Advanced Structure and Style (3)

Spanish 530 Graduate Seminar: Historical Linguistics (3)

Graduate Seminars in Literature (9 units)

Courses in both Peninsular and Spanish-American literature chosen from the following:

Spanish 556 Grad Sem: Spanish Poetry (3)

Spanish 557 Grad Sem: Spanish-American Poetry (3)

Grad Sem: Spanish-American Novel (3) Spanish 567

Spanish 571 Grad Sem: Spanish Prose and Narrative Fiction (3)

Grad Sem: Spanish Drama (3) Spanish 575

Spanish 576 Grad Sem: Hispanic Topics (3)

Other Electives (15 units)

Courses may be chosen from the following 400- or 500-level courses (up to 6 of the 15 units may be taken, with the approval of the adviser, in a related field):

Spanish 415 Contemporary Spanish Culture (3)

Spanish 416 Contemporary Spanish-American

Culture (3)

Spanish Literature to Neoclassicism (3) Spanish 430

Spanish-American Literature (3) Spanish 441

Spanish 461 Spanish Literature Since

Neoclassicism (3)

Spanish 466 Introduction to Spanish Linguistics (3)

Dialectology: Current Trends in Modern Spanish 467 Spanish (3)

<sup>\*</sup>Variable topic course may be taken again for credit.

Spanish 468 Spanish-English Contrastive Analysis (3)

Spanish 475T Senior Seminar: Topics in Spanish Peninsular Literature (3)

Spanish 485T Senior Seminar: Topics in Spanish-American Literature (3)

Spanish 556 Graduate Seminar: Spanish Poetry (3)

Spanish 557 Graduate Seminar: Spanish-American

Poetry (3)

Spanish 567 Graduate Seminar: Spanish-American

Novel (3)

Spanish 571 Graduate Seminar: Spanish Prose and Narrative Fiction (3)

Spanish 575 Graduate Seminar: Spanish Drama (3)

Spanish 576 Graduate Seminar: Hispanic Topics (3)

### Spanish: Bilingual Studies Emphasis

Core Courses (6 units)

Spanish 500 Graduate Seminar: Advanced Structure and Style (3)

FL Ed 527 Theory of Bilingual Acquisition (3)

Literature Courses (9 units, 6 of which must be at 500-level) chosen from the following. Must include one course in Peninsular literature and one in Spanish-American literature.

Spanish 430 Spanish Literature to Neoclassicism (3)

Spanish 441 Spanish-American Literature (3)

Spanish 461 Spanish Literature Since

Neoclassicism (3) and valve ail no to manages tol bamap

Spanish 475T Senior Seminar: Topics in Spanish Peninsular Literature (3)

Spanish 485T Senior Seminar: Topics in Spanish-American Literature (3)

Spanish 556 Graduate Seminar: Spanish Poetry (3)

Spanish 557 Graduate Seminar: Spanish-American

Poetry (3)

Spanish 567 Graduate Seminar: Spanish-American Novel (3)

Spanish 571 Graduate Seminar: Spanish Prose and Narrative Fiction (3)

riction (3)

Spanish 575 Graduate Seminar: Spanish Drama (3)

Spanish 576T Graduate Seminar: Hispanic Topics (3)

Culture Courses (9 units, 3 of which must be at 500-level) chosen from the following:

Spanish 415 Contemporary Spanish Culture (3)

Spanish 416 Contemporary Spanish-American

Culture (3)

Spanish 576T Graduate Seminar: Hispanic Topics (3)

Chicano 403 Cultural Differences in Mexico and the

Southwest (3)

Chicano 431 The Chicano Child (3)

Chicano 432 The Chicano Adolescent (3)

Chicano 440 Mexican Intellectual Thought (3)

Chicano 445 History of the Chicano (3)

Chicano 450 The Chicano and Contemporary

Issues (3)

Chicano 453 Mexico Since 1906 (3)

Electives (6 units)

Linguistics (3 units) chosen from the following:

Spanish 466 Introduction to Spanish Linguistics (3)

Spanish 467 Dialectology: Current Trends in Modern Spanish (3)

Spanish 468 Spanish-English Contrastive Analysis (3)

Spanish 530 Graduate Seminar: Historical

Linguistics (3)

Other (3 units) chosen in consultation with adviser. May be in a related field.

With the approval of the graduate committee, a student may substitute a thesis for some of the units required under "Electives." A reading list must be covered by all students. Final evaluation is by a comprehensive written and oral examination, including fluency in the Spanish language. The candidate may, with the approval of the graduate committee, repeat the examination, but once only within two years.

For further information, consult the Department of Foreign Languages and Literatures.

# MASTER OF SCIENCE IN EDUCATION CONCENTRATION IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

This program is multi-disciplinary, involving study in the fields of English, linguistics, language acquisition, anthropology and professional education in order to provide the candidate with the requisite knowledge for success as an ESL teacher, resource specialist or program coordinator. Thirty units are required.

# Admission to Graduate Standing: STANDATE SOC SOFTAUGUS Conditionally Classified TORE as 1881-1881

University requirements include: a baccalaureate degree from an accredited institution with a grade-point average of at least 2.5 in the last 60 semester units attempted (see "Graduate Regulations," for complete statement and procedures). In addition, the candidate must have a 3.0 grade-point average in the major.

#### Prerequisites

- 1. Two years of one foreign language, or one year each of two foreign languages with an average 3.0 GPA;
- 2. English 301 and 303 with a grade of B or better;
- 3. One of the following: English 300, 311, 312, 321, 322 or an equivalent survey of English or American literature with a grade of B or better;
- 4. Linguistics 406 with a grade of B or better;
- Oral and written proficiency in English to be determined at time of application.

### Core Courses (15 units)

FL Ed 443A Principles of Teaching English to Speakers of Other Languages (3)

FL Ed 443B Principles of Teaching English to Speakers of Other Languages (3)

FL Ed 527 Theory of Bilingual Language Acquisition (3)

FL Ed 560 Second Language Assessment (3)

FL Ed 595 Curriculum and Program Design for TESOL (3)

#### Electives (12 units required)

Choose courses from at least three of the following four categories (no more than six units may be chosen from 300-level and three units must be from 500-level course):

#### Culture

American Studies 301 The American Character (3)

American Studies 345 American Dream (3)

Anthro 300 Language and Culture (3)

Anthro 360 Contemporary American Culture (3)

Anthro 450 Culture and Education (3)

### Linguistics \_\_\_\_\_\_ Equipment for a season

French, German, Japanese, Spanish 466 Introduction to French, German, Japanese or Spanish Linguistics (3)

FL Ed 468 TESOL Contrastive Analysis (3)

Japanese 468 Japanese-English Contrastive Analysis (3)

Spanish 468 Spanish-English Contrastive Analysis (3) Linguistics 351 Introduction to Linguistic Phonetics and

Phonology (3)

Linguistics 442 Changing Words (3)

Linguistics 505 Phonological Analysis (3)

Linguistics 507 Grammatical Analysis (3)

Linguistics 508 Theories of Syntax (3)

Linguistics 580T Special Topics in Linguistics (3)

(subject to adviser's approval of topics)

#### English and Speech Communication

English/Ling 305 The English Language in America (3)

English 440 History of the English Language (3)

A 400-or 500-level English or American Literature or language course (3)

Speech Comm 320 Intercultural Communication (3)

#### Professional Education

Ed Elem 529 Graduate Studies: Learning Theory for Classroom Use (3)

Ed Elem 530 Graduate Studies in Elementary Education: Second Languages (3)

Ed Elem 542 Current Issues and Problems in Bilingual-Bicultural Education (3)

Ed Sec 509 Construction, Analysis and Interpretation of Educational Tests (3)

FL Ed 545 Teaching Culture in the Language Classroom (3)

Psychology 311 Educational Psychology (3) Reading 480 The Teaching of Reading (4) Reading 514 Remediation of Reading (4)

#### Culminating Experience

FL Ed 596 TESOL Practicum (3) Graduate Centrality Springlas Ameri

For further information, contact the TESOL graduate program adviser in the Department of Foreign Languages and Literatures.

# Foreign Language Courses

196 Student-to-Student Tutorials (1-3) See index.

#### 198 Programmed Courses in Uncommonly Taught Languages (1-3)

Intensive individualized programmed instruction in specific languages other than those regularly offered, such as Turkish. To develop the skills of auditory comprehension and speaking in the

language to form a basis for later development of the reading and writing skills. A minimum of 3 hours per week in the learning laboratory and regular sessions with native informants are required for each unit of credit. May be repeated for credit.

#### 495 Internship in Foreign Languages (3)

Prerequisites: The 310 and 311 course in the appropriate language and consent of instructor. Supervised field experience in multinational businesses locally or abroad. Daily use of a foreign language on the job and concurrent enrollment in a School of Business internship are required. Credit/No Credit Course.

496 Student-to-Student Tutorials (1-3) See index.

# Foreign Language Education Courses

099 Developmental Writing (Same as English 099)

#### 442 Teaching Foreign Languages in the Secondary School (3)

Prerequisites: French, German or Spanish 466; and admission to teacher education or consent of instructor. Principles, methods and materials of language learning and teaching. Includes lectures, activities and fieldwork. Required before admission to stu-

# 443A Principles of Teaching English to Speakers of Other Languages (3)

Prerequisite: French, German or Spanish 466 or Linguistics 406. Recent trends, including the expanded use of electromechanical aids, programmed instruction and applied linguistics in the teaching of English to speakers of other languages. Techniques related to auditory comprehension and oral production of English. (Same as Linguistics 443A)

# 443B Principles of Teaching English to Speakers of Other Languages (3)

Prerequisite: French, German or Spanish 466 or Linguistics 406 and FL-Ed 443A. Recent trends, including the use of electromechanical aids, programmed instruction, and applied linguistics in the teaching of English to speakers of other languages. Techniques related to the reading and writing of English. (Same as Linguistics 443B)

### 449E Externship in Secondary Teaching (3)

See description under Department of Secondary Education.

### 4491 Internship in Secondary Teaching (10)

See description under Department of Secondary Education.

## 449S Seminar in Secondary Teaching (2) M to ampho etc.

See description under Department of Secondary Education.

#### 468 TESOL Contrastive Analysis (3)

Prerequisites: junior standing or above, successful completion of Spanish, French or German 466 and at least one 400-level Linguistics class. Theory and performance techniques for contrasting phonological, grammatical and lexical structures of English and three selected world languages.

### 527 Theory of Bilingual Language Acquisition (3)

Prerequisites: Spanish, French or German 466 and Spanish 468 or FL-Ed 468 or Linguistics 406 and consent of instructor. Methodology for research in bilingual language acquisition and development; socio-linguistic and psycholinguistic patterns in bilingualism; interactions of language and culture in the language acquisition process.

#### 545 Teaching Culture in the Language Classroom (3)

Prerequisite: FL-Ed 443A,B or consent of instructor. Provides a framework for teaching culture and value systems in the second language classroom. Emphasis on teaching patterns of culture, methods of cultural comparison, audiovisual materials and textbook evaluation.

#### 560 Second Language Assessment (3)

Prerequisites: FL-Ed 442 or 443A, B or equivalent. Theories, issues, basic statistical concepts in second language testing and techniques for second language assessment. Practice in analyzing commercial language tests and in constructing tests for classroom use.

#### 595 Curriculum and Program Design for TESOL (3)

Prerequisite: FL-Ed 443A, B. Curriculum and program design for TESOL, including such factors as classroom management systems, appropriate selection and/or design of program materials.

#### 596 TESOL Practicum (3)

Prerequisites: completion of the appropriate program core courses (TESOL Certificate or M.S. Education-TESOL) and consent of instructor or adviser. Teaching English to speakers of other languages at Cal State Fullerton or in local schools. Supervised by instructor and supervisors. Seminar meetings by arrangement. May be repeated for credit.

### 599 Independent Graduate Research (1-3)

Prerequisites: graduate standing and consent of instructor. Supervised research projects in teaching English to speakers of other languages (TESOL). May be repeated for credit.

# Chinese Courses

### 100 Introduction to Chinese Conversation (3)

Introduction to spoken Mandarin Chinese, with emphasis on vocabulary development, use of common phrases and sentences, and culturally appropriate language at beginning levels. Conducted mainly in Chinese.

# 101 Fundamental Chinese — A (5)

Practice in listening comprehension, speaking, reading and writing to develop control of the sounds and the basic structure of Chinese. Audiolingual assignments in the language laboratory. Conducted in Chinese.

### 102 Fundamental Chinese — B (5)

Prerequisite: Chinese 101 or equivalent. Practice in listening comprehension, speaking, reading and writing to develop control of the sounds and the basic forms and structure of Chinese. Audiolingual assignments in the language laboratory. Conducted in Chinese.

# 203 Intermediate Chinese — A (5)

Prerequisite: Chinese 102 or equivalent. Instruction in listening, speaking, reading, and writing of modern Chinese language at the intermediate level.

### 204 Intermediate Chinese — B (5) and applications and applications and

Prerequisite: Chinese 203 or equivalent: Instruction in listening, speaking, reading, and writing of modern Chinese. Conducted in Chinese.

#### 299 Directed Study (1-3)

Prerequisite: Chinese 102 or equivalent. Supervised study projects in Chinese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

# French Courses

### 101 Fundamental French — A (5)

This first course systematically introduces essentials of the French language: fundamental vocabulary and grammatical structures. Conversational and reading/writing skills are equally stressed, and relevant cultural aspects are considered. Practice in the language laboratory required. Taught in French.

#### 102 Fundamental French — B (5)

Prerequisite: French 101 or equivalent. Continuation of systematic introduction of fundamental vocabulary and grammatical structures. Equal emphasis on speaking and reading/writing skills is maintained, along with considerations of French culture. Practice in the language laboratory is required. Taught in French.

#### 103 Intensive Review of Fundamental French (5)

Prerequisite: Two or three years of high school French or equivalent. Intensive review of fundamental skills leading to communicative competency in French: comprehending basic messages, conversing about everyday situations, reading, writing simple essays and descriptions, interacting successfully with members of French-speaking cultures. Conducted in French.

### 203 Intermediate French — A (3)

Prerequisite: French 102 or equivalent. Intensive practice in conversation and composition involving intermediate-level use of language and further exploration of French culture. Concurrent enrollment in French 213 is recommended. Practice in the language laboratory is required. Taught in French.

## 204 Intermediate French — B (3)

Prerequisite: French 203 or equivalent. Intensive review of grammatical structures, with a view to developing mastery of conversational and compositional skills at the intermediate level. Concurrent enrollment in French 214 is recommended. Practice in the language laboratory is required. Taught in French.

# 213 Intermediate Diction and Phonetics (2) (Formerly 230)

Prerequisite: French 102 or equivalent. Analysis of particular problems in pronunciation. Practice in accurate pronunciation of cultural and literary materials. Concurrent enrollment in French 203 is recommended. Taught in French.

# 214 Intermediate Conversation and Composition (2) (Formerly 240)

Prerequisite: French 203 or equivalent. Discussion and practice in written expression based on cultural and literary materials. Concurrent enrollment in French 204 recommended. Taught in French.

#### 300 French Conversation (3)

Prerequisite: French 204 or equivalent. Development of oral control of the language through discussions, oral presentations and dialogues. Vocabulary development in areas of student concerns. Conducted in French.

### 307 Advanced Composition and Grammar (3)

#### (Formerly 317)

Prerequisite: French 204 or equivalent. Free oral and written expression. Conducted in French.

#### 308 Advanced Composition and Grammar (3) (Formerly 318)

Prerequisite: French 204 or equivalent. The control of French as an instrument for free oral and written expression. Conducted in French.

### 310 French in the Business World (3)

Prerequisite: French 204 or consent of instructor. Designed to give students a working knowledge of business language (oral and written) in the French-speaking world. Emphasis on cultural and sociological contexts of business procedures. Analysis of appropriate current periodicals. Conducted in French.

#### 311 French for International Business (3)

Prerequisite: French 204 or consent of instructor. Designed to give students experience in reading comprehension and analysis of materials dealing with economic and political realities in the French-speaking world. Analysis of appropriate current periodicals. Conducted in French.

### 315 Origins of Modern France (3)

Prerequisite: French 204 or equivalent. The social, intellectual and artistic origins of French civilization: feudal society becoming the *ancien régime*; the medieval world-view transformed by the Renaissance. Literary selections in modern French translation. Conducted in French.

#### 325 Contemporary French Civilization (3)

Prerequisite: French 204 or equivalent. Reading and discussion to develop understanding of the social and intellectual problems, trends, and contributions of present-day France. Strengthening facility in the language. Conducted in French.

# 375 Introduction to Literature (3)

Prerequisite: French 204 or equivalent. The nature of human language, the literary creation, reading, and what critics are able to say about literary works. Reading and discussion of some typical, mainly contemporary, texts. Conducted in French.

#### 385 Techniques of French-English Translation (3)

Prerequisites: French 307 or equivalent. An overview of theories of translation; examination of several types and examples of translation (technical to literary). Major emphasis on actual translation from English to French and French to English.

#### 407 French Film (3)

Prerequisite: French 307 or 308 or equivalent. The developing art of the French film, with special emphasis on the many roles of language. Subjects treated include: montage, visual/verbal meaning, literary/cinematic narrative, non-realistic language, read language, non-narrative continuity. Conducted in French.

# 415 French Classicism (3)

Prerequisites: French 307 and 375. The decisive moment in French experience. Focus on literature of the Classic period (1660-1685) but open at both ends to include the formation and perenniality of French Classicism. Conducted in French.

#### 425 French Romanticism (3)

Prerequisites: French 307 and 375. The revolution in feeling and intellect in 19th-century France. The Romantic period (1820-1850). May include material preceding or following those dates. Conducted in French.

#### 466 Introduction to French Linguistics (3)

Prerequisite: French 307 or 308. Analytical procedures of general linguistics applied to French. Structural contrasts between French and English. The application of linguistic analysis to the teaching of modern foreign languages.

#### 475A,B,C,D Seminar in 20th-Century French Literature (3,3,3,3)

Prerequisites: French 307, 315, 375, and 415 or 425. If 415 or 425 has not been completed, one must be taken concurrently. The study of 20th-century French literature organized around four major themes. Conducted in French.

# 475A Exploration of the Self (3)

See prerequisites above. Search for identity and the quest for personal authenticity. The role of the conscious and unconscious mind and of artistic creativity. Proust, Gide, Mauriac, Valéry, nunciation and entensive gractice of changic enterns include

### 475B In Search of the Real (3)

See prerequisites above. The surrealist revolt against bourgeois logic, mores and literature. From Dada to automatic writing to Revolution to l'amour fou. Includes precursors and kindred spirits (e.g. Lautréamont, Jarry).

#### 475C The Individual and Society (3)

See prerequisites above. Attitudes toward personal freedom; the existential sense of responsibility toward one's fellows. Saint-Exupéry, Malraux, Sartre, Camus, etc.

#### 475D Literature and Anti-Literature (3)

See prerequisites above. In the period since World War II French writers have not only transformed the traditional genres (as in the New Theatre, the New Novel and the New Criticism of the 1950s and 1960s) but have contested the institution of literature itself.

#### 485T Senior Seminar in French Literature (3)

Prerequisites: French 307, 315, 375, and senior standing. A literary current, period, author, genre or problem. Subject will change each time course is given. May be repeated for credit. Conducted in French.

### 499 Independent Study (1-3)

Supervised projects in French language or literature. Consent of the instructor and department chair required. May be repeated for credit.

#### 500 Graduate Seminar: Advanced Structure and Style (3)

Prerequisite: consent of instructor. The course is devoted to (1) a comparative analysis of English and French linguistic structures systematically applied in exercises and translations, and (2) analysis of style in French by distinguishing between niveaux de langue and learning to identify specific styles in a variety of literary and non-literary texts. Conducted in French.

#### 520 Graduate Seminar: Old French (3)

Prerequisite: consent of instructor. Readings in the medieval literature of northern France. A variety of dialects and centuries. Conducted in French. and average to COL many of contract of the

### 530 Graduate Seminar: Historical Linguistics (3)

Prerequisites: French 466 or consent of instructor. Some previous study of Latin recommended. Introduction to the principles of historical linguistics. Primary emphasis on the transformation of classical Latin (phonology, morphology, syntax and lexicon) into contemporary French. Conducted in French.

### 557 Graduate Seminar: French Poetry (3)

Prerequisite: consent of instructor. An exploration of poetry of French expression which will focus on specific poets or poetic movements while situating them in their historical context. Various critical strategies may be used to analyze the selected works. Conducted in French.

### 571 Graduate Seminar: French Prose (3)

Prerequisite: consent of instructor. An exploration of the narrative genre in French which will focus on specific texts or movements while situating them in their historical context. Various critical strategies may be used to analyze these texts. Conducted in French. Total guarattus do based not not orque o guibean to

#### 575 Graduate Seminar: French Drama (3)

Prerequisite: consent of instructor. A chronological overview of French drama. This course also treats, in each period, relationships between society, dramatic and theatrical forms, typical thematic content of plays, and the social role of theatre. Conducted in French. A The State of the Concession of the Concession

### 576T Graduate Seminar: Major Writers (3)

Prerequisite: consent of instructor. May be repeated for credit. Conducted in French.

### 598 Thesis (3-6) the seri normani to agree of the anoburs

Prerequisite: recommendation of student's graduate committee.

#### 599 Independent Graduate Research (1-3)

Prerequisites: fluency in French and consent of instructor. Supervised research projects in French language or literature. May be repeated for credit.

# German Courses

#### 101 Fundamental German — A (5)

Development of listening and reading comprehension, speaking, writing, and cultural awareness to communicate on a basic level. Included is an introduction to customs, culture, and civilization of German-speaking countries. Conducted primarily in German.

#### 102 Fundamental German — B (5)

Prerequisite: German 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing, and cultural awareness to communicate on a basic level. Further study of customs, culture, and civilization of German-speaking countries. Conducted primarily in German.

#### 203 Intermediate German — A (3)

Prerequisite: German 102 or equivalent. Development of listening comprehension and speaking. Emphasis on vocabulary building and developing accurate pronunciation. Conducted in German. May be taken concurrently with German 204, 213 or 214.

#### 204 Intermediate German — B (3)

Prerequisite: German 102 or equivalent. Development of listening and reading comprehension and writing. Emphasis on vocabulary building and developing grammatical accuracy. Conducted in German. May be taken concurrently with German 203, 213 or 214.

#### 213 Intermediate Reading-A (2)

Prerequisite: German 102 or equivalent. Development of reading comprehension using edited and basic authentic materials. May be taken concurrently with German 203 or 204. Conducted in German.

### 214 Intermediate Reading-B (2)

Prerequisite: German 213 or equivalent. Continued refinement of reading comprehension based on authentic materials. May be taken concurrently with German 203 or 204. Conducted in German.

### 300 German Conversation (3)

Prerequisite: German 204 or equivalent. Development of oral control of the language in the context of students' own or contemporary concerns. Conducted in German.

# 305 Advanced Conversation and Composition (3) (Formerly 317)

Prerequisite: German 204 or equivalent. Open to lower-division students with consent of instructor. Free oral and written expression. Conducted in German.

### 310 German in the Business World (3) 310 making plant 002

Prerequisite: German 204 or consent of instructor. Designed to give students a working knowledge of business language in the German-speaking world. Emphasis on business correspondence, conversation between business partners and the language of advertising. Conducted in German.

#### 311 German for International Business (3)

Prerequisites: German 204; 310 recommended. Emphasis on building vocabulary of the German business world and overview of the German economy and business practices. Intensive work on grammatically correct writing with computer feedback, aural comprehension, with taped interviews on conversation and reading comprehension. Conducted in German.

#### 315 Introduction to German Civilization (3)

Prerequisite: German 204 or equivalent. Open to lower-division students with consent of instructor. Readings and discussions in German literature, arts and institutions to develop insights into German culture, while strengthening facility with the language. Conducted in German.

#### 325 Current Trends in Culture of German-Speaking Peoples (3)

Prerequisite: German 204 or equivalent. Open to lower-division students with consent of instructor. Readings and discussion of German contributions to present-day civilization while strengthening facility with German language. Conducted in German.

#### 335 Introduction to Literature (3) (Formerly 375)

Prerequisite: German 305. Introduction to the art of literature in a cultural context. Analysis and interpretation of various texts. Conducted in German.

#### 399 German Phonetics (3)

Prerequisite: intermediate competency. Analysis of students' pronunciation and intensive practice of phonetic patterns including intonation. Development of conversational competency. May be repeated for credit; but may count only once toward German major.

# 401 Advanced Conversation Practice and Vocabulary Expansion (3)

Prerequisite: German 305 or consent of instructor. Intensive oral practice with emphasis on vocabulary expansion. Conducted in German.

#### 417 Advanced Writing and Composition (3)

Prerequisite: German 305 or consent of instructor. Practice in writing on various topics in detail, in expressing hypotheses and presenting arguments or points of view accurately and effectively. Emphasis on development differences of formal and informal style. Conducted in German.

#### 430 German Literature and Culture to the Baroque (3)

Prerequisites: German 305, 315, and 335, or consent of instructor. Masterpieces of German literature from the *Hildebrandslied* to *Der Abenteuerliche Simplicissimus* and their relationship to cultural, historical and intellectual developments between ca. 800-1670 A.D. Conducted in German.

440 18th-Century German Literature and Culture (3)

Prerequisites: German 305, 315, and 335, or consent of instructor. The principal authors and movements (Enlightenment, Storm and Stress, Classicism, early Romanticism) of the 18th century. Conducted in German.

450 19th-Century German Literature and Culture (3)

Prerequisites: German 305, 315, and 335, or consent of instructor. 19th-century German literature from Romanticism to Naturalism. Decisive philosophic, political and economic influences. Conducted in German.

460 20th-Century German Literature and Culture (3)

Prerequisites: German 305, 315, and 335, or consent of instructor. Major German prose, drama and poetry of the 20th century. Conducted in German.

462 Cultural and Educational Policies in Germany (3)

Prerequisite: two years of teaching experience. An exploration in the cultural and educational policies in Germany. Format: a minimum of 15 hours a week will be spent in lecture-discussion, 5 hours in demonstrations, and 10 hours in fieldwork.

466 Introduction to German Linguistics (3)

Prerequisite: German 305 or consent of instructor. Analytical procedures of general linguistics as applied to German. Structural contrasts between German and English. The application of linguistic analysis to the teaching of modern foreign languages.

482 German Literature and Culture in Film (3)

Prerequisite: advanced standing in literature or consent of instructor. A critical study of literary works and their film adaptations. Significant works of German literature will be analyzed and compared in both art forms. May be repeated for credit with different film syllabus.

485T Senior Seminar in German Literature (3)

Prerequisite: senior standing in German. Research and discussion of a literary movement, a genre or an author. Subject varies and is announced in the class schedule. May be repeated for credit with different topic. Conducted in German.

499 Independent Study (1-3)

Supervised research projects in German language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

500 Graduate Seminar: Advanced Structure and Style (3) Prerequisite: consent of instructor. Conducted in German.

530 Graduate Seminar: Historical Linguistics (3)

Prerequisite: German 466 or consent of instructor. Conducted in German.

571T Graduate Seminar: German Literature (3)

Prerequisite: consent of instructor. Subject will vary and will be announced in the class schedule. May be repeated for credit with a different topic. Conducted in German.

576T Graduate Seminar: Major Writers (3)

Prerequisite: consent of instructor. Subject will vary and will be announced in the class schedule. May be repeated for credit with a different topic. Conducted in German.

598 Thesis (3-6) and analytica to COI mailed and opening

Prerequisite: recommendation of student's graduate committee.

599 Independent Graduate Research (1-3)

Prerequisites: fluency in German and consent of instructor. Supervised research projects in German language or literature. May be repeated for credit.

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# Greek Courses

101 Fundamental Greek — A (3)

Practice to develop a reading knowledge and a writing ability in ancient Greek. Biblical texts.

102 Fundamental Greek — B (3)

Prerequisite: Greek 101 or equivalent. Practice to develop a reading knowledge and a writing ability in ancient Greek. Biblical texts.

299 Directed Study (1-3)

Prerequisite: Greek 102 or equivalent. Supervised study projects in Greek language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

# Hebrew Courses

101 Fundamental Hebrew — A (4)

Practice in listening comprehension, speaking, reading and writing Hebrew (same as Religious Studies 101).

102 Fundamental Hebrew — B (4)

Prerequisite: Hebrew 101. Practice in listening comprehension, speaking, reading and writing Hebrew (Same as Religious Studies 102).

# Italian Courses

101 Fundamental Italian — A (4)

Practice in listening comprehension, speaking and writing of Italian. Audiolingual assignments in the language laboratory. Conducted in Italian.

#### 102 Fundamental Italian - B (4)

Prerequisite: Italian 101 or equivalent. Practice in listening comprehension, speaking, reading and writing of Italian. Audiolingual assignments. Conducted in Italian.

#### 299 Directed Study (1-3)

Prerequisite: Italian 102 or equivalent. Supervised study projects in Italian language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

# Japanese Courses

Note: Japanese 101 is not open to students who have completed two or more years of high school study or one term of college study in Japanese, unless such study was completed three years or more before entering the class. Japanese 102 is not open to students who have completed two or more years of high school study or two terms of college study in Japanese, unless such study was completed three years or more before entering the class.

#### 100 Introduction to Japanese Conversation (3)

Introduction to spoken Japanese, with emphasis on vocabulary development, use of common phrases and sentences, and culturally appropriate language at beginning levels. Conducted mainly in Japanese.

#### 101 Fundamental Japanese — A (5)

Development of listening and reading comprehension, speaking, writing, and cultural awareness to communicate on a basic level. Included is an introduction to Japanese customs, culture, and civilization.

#### 102 Fundamental Japanese — B (5)

Prerequisite: Japanese 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing, and cultural awareness to communicate on a basic level. Further study of Japanese customs, culture, and civilization.

# 105 Intensive Review of Fundamental Japanese (5) (Formerly 103)

Prerequisites: prior experience equivalent to Japanese 101 and 102 or two years of high school Japanese. Intensive course to develop listening and reading comprehension, speaking, writing, and cultural awareness necessary to communicate on a basic level.

#### 203 Intermediate Japanese — A (5)

Prerequisite: Japanese 102 or equivalent. Development of listening and reading comprehension, and oral and written practice in Japanese based on cultural and literary materials. Review of grammar. Conducted in Japanese.

#### 204 Intermediate Japanese — B (5)

Prerequisite: Japanese 203 or equivalent. Instruction in reading, writing, speaking and listening in Japanese. Audio-lingual assignments in the language laboratory. Conducted mostly in Japanese.

#### 299 Directed Study (1-3)

Prerequisite: Japanese 102 or equivalent. Supervised study projects in Japanese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

# 305 Advanced Japanese — A (3) 100 m based not be applied to the second of the second o

Prerequisite: Japanese 204 or equivalent. Practice in listening comprehension, speaking, reading and writing of advanced Japanese in the context of contemporary concerns.

#### 306 Advanced Japanese — B (3)

Prerequisites: Japanese 305 or equivalent. Practice in listening comprehension, speaking, reading and writing of Japanese in the context of contemporary concerns.

# 307 Advanced Spoken Japanese (3)

Prerequisite: Japanese 204 or equivalent. Emphasis on the spoken aspect of advanced Japanese through dialogs, discussions and oral presentations in the context of contemporary concerns. Conducted in Japanese.

#### 308 Advanced Written Japanese (3)

Prerequisite: Japanese 204 or equivalent. Emphasis on the written aspect of advanced Japanese through expanding knowledge of vocabulary and Kanji. Conducted in Japanese.

#### 310 Japanese for Business (3)

Prerequisites: Japanese 204 or consent of instructor. Designed to acquaint the student with the practical vocabulary and structure of business language, as well as the cultural background of business procedures in the Japanese business world. Conducted mainly in Japanese.

### 311 Japanese for International Business (3)

Prerequisites: Japanese 204 or consent of instructor. Acquisition of vocabulary and language structures for Japanese in the international business world and related economic situations. Emphasis on comprehension of business terminology through conversation, reading, and writing. Conducted mainly in Japanese.

### 315 Introduction to Japanese Civilization (3)

Prerequisite: Japanese 204 or equivalent or consent of instructor. Readings and lectures in Japanese literature, arts, and institutions from earliest history to 1868, to develop insights into Japanese culture while strengthening facility in the language. Conducted in Japanese.

### 316 Modern Japan (3)

Prerequisites: Japanese 204 and 315 or consent of instructor. Readings and lectures in Japanese literature, arts, and institutions from 1868 to the present, to develop insights into Japanese culture while strengthening facility in the language. Conducted in Japanese.

#### 375 Introduction to Literary Forms (3)

Prerequisite: Japanese 306 or consent of instructor. Introduction to literary forms and concepts of literary techniques. Analysis and interpretation of various texts. Conducted in Japanese.

### 410 Classical Japanese (3)

Prerequisite: Japanese 306 or equivalent. Designed to acquaint the student with classical Japanese grammar in preparation for reading classical Japanese literature. Conducted in Japanese.

### 430 Introduction to Japanese Classic Literature (3)

Prerequisites: Japanese 375 and 410 or consent of instructor. The literary use of language, literary creation, reading, and critical evaluation of literary works. Reading excerpts of major classics with lectures on literary trends of each historical period. Conducted in Japanese.

#### 440 Introduction to Modern Japanese Literature (3)

Prerequisite: Japanese 375 or consent of instructor. The literary use of language, literary creation, reading, and critical evaluation of literary works. Reading excerpts of modern Japanese literary works with lectures on different trends of various schools. Conducted in Japanese.

### 466 Introduction to Japanese Linguistics (3)

Prerequisite: Japanese 306 or equivalent. The analytical procedures of general linguistics as applied to phonological, semantic, morphological, syntactic and discourse aspects of Japanese. Conducted in Japanese.

#### 468 Japanese-English Contrastive Analysis (3)

Prerequisite: Japanese 306 and 466 (may be taken concurrently) or equivalent. Contrastive analysis of phonological, lexical, syntactic and discourse aspects of Japanese and English. Conducted in Japanese to provide advanced training in the language.

#### 485T Senior Seminar: Variable Topics in Japanese (3)

Prerequisite: Japanese 375 and at least one 400-level course in Japanese or consent of instructor. Research and discussion of a cultural, literary or linguistic theme. Subject varies and is announced in the class schedule. May be repeated for credit with a different topic. Conducted in Japanese. Variable topics include: The Japanese Newspaper; The Study of the Tale of Genji; The Study of Yukio Mishima.

499 Independent Study (1-3) Supervised projects in Japanese language or literature to be taken with consent of instructor and department chair. May be repeat-

# Latin Courses

# 101 Fundamental Latin — A (4)

Practice to develop a reading knowledge and a writing ability in Latin. Modern techniques of language instruction will be applied. The Spanish 315 or consent of instructor

### 102 Fundamental Latin — B (4)

Prerequisite: Latin 101 or equivalent. Practice to develop a reading knowledge and a writing ability in Latin. Modern techniques of language instruction will be applied.

#### 299 Directed Study (1-3)

Prerequisite: Latin 102 or equivalent. Supervised study projects in Latin language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

# Portuguese Courses

#### 101 Fundamental Portuguese — A (4)

Prerequisite: prior successful study in a Romance language. Development of listening and reading comprehension, speaking, writing, and cultural awareness to communicate on a basic level. Included is an introduction to customs, culture, and civilization of Portuguese-speaking countries. Conducted in Portuguese.

### 102 Fundamental Portuguese — B (4)

Prerequisite: Portuguese 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing, and cultural awareness to communicate on a basic level. Further study of customs, culture, and civilization of Portuguese-speaking countries. Conducted in Portuguese.

#### 310 Portuguese in the Business World (3)

Prerequisites: Portuguese 102 or consent of the instructor. Emphasis on practical business-related terminology and on the cultural and socio-political contexts of doing business in Portuguesespeaking countries. Conducted in Portuguese.

#### 317 Advanced Conversation and Composition (3)

Prerequisite: Portuguese 102 or equivalent or consent of instructor. Emphasis on free oral and written expression. Conducted in Portuguese.

#### 320 Introduction to Luso-Brazilian Culture and Civilization (3)

Prerequisite: Portuguese 310 or 317 or equivalent, reading knowledge of Portuguese or consent of instructor. The main currents of Portuguese culture and civilization and Brazil's intellectual and artistic development from discovery to independence. Conducted in Portuguese.

#### 325 Contemporary Brazilian Civilization (3)

Prerequisite: Portuguese 310 or 317 or equivalent. Readings and discussion to develop understanding of the social and intellectual problems, trends, and contributions to Brazil since independence. Present day Brazil. Conducted in Portuguese.

#### 499 Independent Study (1-3)

Supervised projects in Portuguese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

# Russian Courses

#### 101 Fundamental Russian — A (5)

Development of listening and reading comprehension, speaking, writing, and cultural awareness to communicate on a basic level. Included are brief reviews of the political and social changes that have occurred in Russia. Conducted mainly in Russian.

#### 102 Fundamental Russian — B (5)

Prerequisite: Russian 101 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Further discussions about recent developments in the political and economic system in Russia. Conducted mainly in Russian.

# 203 Intermediate Russian — A (5)

Prerequisite: Russian 102 or equivalent. Development of listening comprehension and speaking. Emphasis on vocabulary building and developing accurate pronunciation. Included are videotapes and discussions about changes shaping the Russian economy. Conducted in Russian.

### 204 Intermediate Russian — B (5)

Prerequisite: Russian 203 or equivalent. Development of listening and reading comprehension and writing. Included are reading of edited and authentic materials, and articles from Russian newspapers and magazines. Conducted in Russian.

#### 299 Directed Study (1-3)

Prerequisite: Russian 102 or equivalent. Supervised study projects in Russian language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

# Spanish Courses would be untituded at 18 278

Note: Spanish 101 is not open to students who have completed two or more years of college study in Spanish, unless such study was completed three years or more before entering the class. Spanish 102 is not open to students who have completed two or more years of high school study or two terms of college study in Spanish, unless such study was completed three years or more before entering the class.

#### 101 Fundamental Spanish — A (5)

Development of listening and reading comprehension, speaking, writing, and cultural awareness to communicate on a basic level. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. Conducted primarily in Spanish.

### 102 Fundamental Spanish — B (5)

Prerequisite: Spanish 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing, and cultural awarness to communicate on a basic level. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. Conducted primarily in Spanish.

### 105 Intensive Review of Fundamental Spanish (5) (Formerly 103)

Prerequisite: prior experience equivalent to Spanish 101 and 102 or two years of high school Spanish. Intensive course to develop listening and reading comprehension, speaking, writing, and cultural awareness necessary to communicate on a basic level. Conducted primarily in Spanish.

#### 201 Spanish for Spanish Speakers (3)

Prerequisite: consent of instructor. Intermediate course designed to strengthen and develop student's existing communicative skills in Spanish. Emphasis on oral expression, vocabulary building, proficient spelling, grammar, reading and composition. Students may not receive credit for both Spanish 201 and 203. Conducted in Spanish.

#### 203 Intermediate Spanish — A (3)

Prerequisite: Spanish 102 or equivalent. Development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. Emphasis on oral expression and developing correct pronunciation. Concurrent enrollment in Spanish 213 is recommended. Conducted in Spanish.

#### 204 Intermediate Spanish — B (3)

Prerequisite: Spanish 201 or 203 or equivalent. Continued development of listening and reading comprehension, practice in speaking and writing Spanish based on cultural and literary materials. Emphasis on vocabulary building and developing grammatical accuracy. Concurrent enrollment in Spanish 214 is recommended. Conducted in Spanish.

#### 213 Intermediate Conversation (2)

Prerequisite: Spanish 102 or 105 or equivalent. Practice in oral expression. Concurrent enrollment in Spanish 203 is recommended. Conducted in Spanish.

# 214 Intermediate Composition (3)

Prerequisite: Spanish 201 or 203 or equivalent. Practice in written expression based on cultural and literary materials. Concurrent enrollment in Spanish 204 is recommended. Conducted in Spanish.

#### 299 Directed Study (1-3)

Prerequisite: Spanish 102 or equivalent. Supervised study projects in Spanish language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

#### 300 Spanish Conversation (3)

Prerequisite: Spanish 204 or equivalent. To develop oral control of the language in the context of students' own or contemporary concerns. Not open to those with native-like proficiency in Spanish. Conducted in Spanish.

#### 301 Advanced Conversation and Composition (3) (Formerly 317)

Prerequisite: Spanish 204 and 214 or equivalent. Open to lowerdivision students with consent of instructor. Emphasis on free oral and written expression. Conducted in Spanish.

#### 310 Spanish in the Business World (3)

Prerequisite: Spanish 204 and 214. Practical vocabulary and structure of business language, as well as the cultural background of business procedures in the Hispanic world. No credit toward Spanish major or minor. Conducted in Spanish.

#### 311 Spanish for International Business (3)

Prerequisite: Spanish 310, which may be taken concurrently, or consent of instructor. Acquisition of vocabulary appropriate to the Hispanic business world and study of its economic institutions. Emphasis on reading comprehension, conversation and composition. No credit toward Spanish major. Conducted in Spanish.

#### 315 Introduction to Spanish Civilization (3)

Prerequisite: Spanish 301 or 310, which may be taken concurrently, or equivalent. Readings and discussions in Spanish literature, arts and institutions. Strengthening of facility in the language. Conducted in Spanish.

#### 316 Introduction to Spanish-American Civilization (3)

Prerequisite: Spanish 301 or 310, which may be taken concurrently or equivalent. Readings and discussion in Spanish-American literature, arts and institutions. Strengthening of facility in the language. Conducted in Spanish.

#### 375 Introduction to Literary Forms (3)

Prerequisite: Spanish 301. Introduction to literary forms and concepts of literary techniques and criticism. Analysis and interpretation of various texts. Strengthening of students' abilities in reading, language and literary criticism. Conducted in Spanish.

#### 400 Spanish for Advanced Students and Teachers (3)

Prerequisite: Spanish 301 or equivalent. Emphasis on free oral and written expression. Conducted in Spanish.

#### 415 Contemporary Spanish Culture (3)

Prerequisite: Spanish 315 or consent of instructor. The cultural - social, economical, political - characteristics of contemporary Spanish life. Conducted in Spanish.

#### 416 Contemporary Spanish-American Culture (3)

Prerequisite: Spanish 316 or consent of instructor. The social, economic, artistic, and political aspects of contemporary life in Spanish America. Conducted in Spanish.

### 430 Spanish Literature to Neoclassicism (3)

Prerequisite: Spanish 315 and 375 or consent of instructor. Spanish literature from its beginnings to 1700. Representative works of each genre. Conducted in Spanish.

#### 441 Spanish-American Literature (3)

Prerequisites: Spanish 316 and 375 or consent of instructor. Spanish-American Literature from modernismo to the present. Conducted in Spanish.

#### 461 Spanish Literature Since Neoclassicism (3)

Prerequisites: Spanish 315 and 375 or consent of instructor. Representative works of 19th- and 20th-century Spain. Conducted in Spanish.

#### 466 Introduction to Spanish Linguistics (3)

Prerequisite: Spanish 301 or equivalent. The analytical procedures of general linguistics as applied to Spanish. Structural contrasts between Spanish and English. The application of linguistic analysis to the teaching of modern foreign languages. Conducted in Spanish.

#### 467 Dialectology: Current Trends in Modern Spanish (3)

Prerequisites: Spanish 301, 400 or equivalent and 466, which may be taken concurrently. The differences in phonology, morphology, syntax and lexicon in linguistic patterns in all Spanishspeaking regions. Conducted in Spanish.

#### 468 Spanish-English Contrastive Analysis (3)

Prerequisites: Spanish 301, 400 or equivalent, and 466 which may be taken concurrently. Theory and performance techniques for contrasting phonological, grammatical and lexical structures of Spanish and English. Conducted in Spanish.

# 475T Senior Seminar: Topics in Spanish

Peninsular Literature (3)

Prerequisite: Spanish 375 or consent of instructor and senior standing in Spanish. Selected topics of the literature of Spain. Subject matter will change. May be repeated for credit. Conducted in Spanish.

# 485T Senior Seminar: Topics in Spanish American Literature (3)

Prerequisite: Spanish 375 or consent of instructor and senior standing in Spanish. Selected topics of the literature of Spanish America. Subject matter will change. May be repeated for credit. Conducted in Spanish.

# 499 Independent Study (1-3)

Supervised research projects in Spanish language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

500 Graduate Seminar: Advanced Structure and Style (3) Prerequisite: Spanish 466 or equivalent. Conducted in Spanish.

530 Graduate Seminar: Historical Linguistics (3)
Prerequisite: Spanish 466 or equivalent. Conducted in Spanish.

556 Graduate Seminar: Spanish Poetry (3)
Prerequisite: Spanish 430 or 461 or equivalent. Conducted in Spanish.

557 Graduate Seminar: Spanish-American Poetry (3)
Prerequisite: Spanish 441 or equivalent. Conducted in Spanish.

567 Graduate Seminar: Spanish-American Novel (3)
Prerequisite: Spanish 441 or equivalent. Conducted in Spanish.

### 571 Graduate Seminar: Spanish Prose and Narrative Fiction (3)

Prerequisite: Spanish 430 or 461 or equivalent. An in-depth study of major prose and narrative works from various historical periods of Spanish literature. Conducted in Spanish.

#### 575 Graduate Seminar: Spanish Drama (3)

Prerequisite: Spanish 430 or 461 or equivalent. Conducted in Spanish.

# 576T Graduate Seminar: Hispanic Topics (3)

Prerequisite: Spanish 430 or 441 or 461 or equivalent. May be repeated for credit with different subject matter. Topics include: Contemporary Spanish Culture, Contemporary Spanish-American Culture, El Ensayo Y La Crítica Literania Hispanoamericana. Conducted in Spanish.

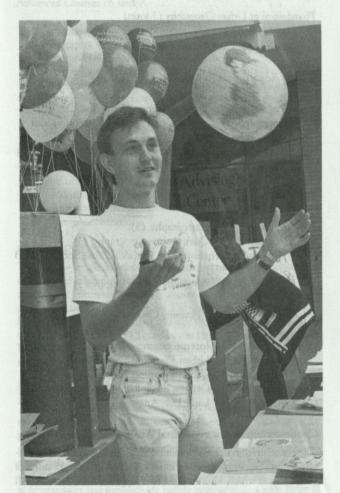
#### 598 Thesis (3-6)

Prerequisite: recommendation of student's graduate committee.

#### 599 Independent Graduate Research (1-3)

Prerequisites: fluency in Spanish and consent of instructor. Supervised research projects in Spanish language or literature. May be repeated for credit.

tions: Emphasiston reading comprehension, conversation and



# Department of Geography

Department Chair: Robert Young Department Office: Humanities 420A

Programs Offered Agona Maria and an internal Bachelor of Arts in Geography Minor in Geography Master of Arts in Geography

#### Faculty

Wayne Engstrom, Gary Hannes, Ronald Helin, Bill Lloyd, Laura Pulido, Bill Puzo, Imre Sutton, Robert Voeks, Barbara Weightman, Robert Young

#### Advisers

Undergraduate: Wayne Engstrom Graduate: Barbara Weightman

# INTRODUCTION

Geography is unified by a common concern: the meaning of place and the organization of territory over the earth's surface. The region is a fundamental concept in geography. Geographers are concerned not only with regional definition and diversity but also with the impacts of societies on such regions as Europe, Latin America and the Pacific Rim or deserts and tropical rain forests.

Territorial, or spatial, organization is another interest of geographers and may be analyzed in terms of natural features and processes as in the study of landforms, climate, and plant communities. Similarly, geographers seek to understand and explain the physical, social, and economic organization of landscapes through studies of land use patterns, cities, cultural frameworks, and linkages between perception and behavior. These patterns and processes which define the character of places and regions are analyzed through mapping, field studies, and computer-assisted methods. These techniques demonstrate the special capacity of geographers to understand territorial relationships and to illustrate the holistic nature of place.

The specialty of cartographer, or map-maker, is the most familiar occupation of geographers, but an even larger number are employed as planners, environmental analysts, teachers, and technical specialists in a wide range of business and governmental areas.

Students and counselors are advised that departmental offerings are numbered according to *course content* as follows:

general courses: 00-09 (e.g., Geography 100) physical courses: 10-29 (e.g., Geography 110 or 323) regional courses: 30-49 (e.g., Geography 344 or 431) human courses: 50-79 (e.g., Geography 160 or 357) technical courses: 80-89 (e.g., Geography 280 or 381) special studies: 90-99 (e.g., Geography 495 or 599)

#### BACHELOR OF ARTS IN GEOGRAPHY

The major consists of at least 45 units of geography, of which at least 30 units must be in upper-division courses. Students may satisfy some requirements with equivalent course work taken at other institutions; they may also transfer into the major an additional 3 units of lower division geography and an approved amount of upper-division geography. Each course counted toward the major and the minor must be completed with a grade of C or higher.

#### Basic Requirements (Geography Core) 15 units

Geography 100 World Geography (3)

Geography 110 Principles of Physical Geography (3)

Geography 160 Culture and Environment (3)

Geography 280-281 Courses in Geographic Techniques (3 units total)

Geography 300 Geographical Writing (3)

or Engl 360 Scientific & Technical Writing (3)

#### Breadth Requirements

Complete 12 units in upper-division geography courses, including 3 units from each of the following groups —physical, regional, human and technical.

#### 400-Level Courses

6 units in 400-level geography classes beyond work used to satisfy the breadth requirement. This cannot include 490s.

#### Career Emphases

Geography graduates typically find employment opportunities in such areas as environmental analysis, urban affairs, regional and urban planning, the travel industry and related technical fields. For this reason, two optional concentrations are available within the major, one in Urban Geography and a second in Environmental Analysis. Students may take the generalist degree or select one of these concentrations.

### Concentration in Urban Geography

The concentration in Urban Geography is within the Geography major. Students therefore must complete at least 45 units of geography, of which 30 units must be in upper-division courses. All courses must be completed with a grade of C or higher. The concentration requires completion of the 15 unit Geography Core and a minimum of three units of upper division regional

geography. With the prior approval of the undergraduate adviser, students completing this concentration may apply an upper-division statistics course taught outside the department toward the requirements for the B.A. in Geography. The following specific requirements exist for the concentration:

Foundations in Urban Geography (3 units)

Geography 370 Urban Geography (3)

Breadth Requirements (6 units)

Geography 329 Physical Geography of the City (3) Geography 357 Social Geography — Perception and Behavior (3)

Technical Courses (6 units)

Geography 381 Cartography (3)
Geography 385 Quantitative Geography (3)

(or equivalent quantitative methods course Sociology 303 or Poli Sci 407)

Geography 481 Automated Cartography (3)

Advanced Analytical and Planning Courses (6 units)

Geography 475 Interpretation of Urban Landscapes (3)

Geography 478 Urban Planning Principles (3)
Geography 484 Urban Planning Methods (3)

Geography 485 Geographic Information Systems (3)

Geography 488 Land Use Analysis (3)

#### Concentration in Environmental Analysis

The concentration in Environmental Analysis is *within* the Geography major. Students therefore must complete at least 45 units of geography, of which 30 units must be in upper-division courses. All courses must be completed with a grade of C or higher. The concentration requires completion of the 15 unit Geography Core and a minimum of three units of upper division regional geography. The following specific requirements exist for the concentration:

Foundations in Environmental Analysis (3 units)

Geography 350 Conservation and Ecology in America (3)

Breadth Requirements (6 units)

Geography 312 Geomorphology (3)

Geography 323 Weather and Climate (3)

Geography 325 Plant Geography (3)

Geography 329 Physical Geography of the City (3)

#### Technical Requirement (3 units)

Geography 381 Cartography (3)

Geography 385 Quantitative Geography (3)

#### Advanced Courses (6 units)

The National Parks (3) Geography 352 Regional Climatology (3) Geography 422 Geography 425 Tropical Rainforests (3)

The Coastal Environment (3) Geography 426 Geography 431 California Environmental Change (3)

Hazards, Disasters and Planning (3) Geography 450

Geography 468 Law and Environment (3)

Land Use Analysis (3) Geography 488

#### Discretionary Specialty Courses (3 units)

One of the following: Geography 481, 485 or an environmental internship (Geography 495) or any other threeunit course listed above but not already counted toward the concentration.

#### MINOR IN GEOGRAPHY

The minor in geography serves students who wish to pursue a second field related to interdisciplinary studies or an elective concentration. Interested students should take at least 21 units of geography, including Geography 100 and three units from the following (110, 120, 160, 170 or 280-281) and a minimum of 12 units of upper-division work. All courses counted toward the minor must be completed with a grade of C or higher. Faculty advisers are available to help students structure their minor in geography.

#### MASTER OF ARTS IN GEOGRAPHY

This program provides advanced study in human and physical geography with an emphasis on theory and research. Graduates are prepared in the application of interpretive and analytical concepts and techniques to a broad spectrum of geographic situations. Such study directly serves those whose careers involve urban, regional, and environmental planning and geographic education. Geographic perspectives and methods are highly applicable to a wide range of careers in business, industry, and government.

#### Admission and Conditional Classification

The department requires a grade-point average of at least 3.0 in the last 60 semester units attempted and a 3.0 grade-point average in all geography courses.

Students who have no, or a limited, background in geography will be expected to make up the deficit by taking appropriate course work in consultation with the departmental graduate adviser.

All students are required to demonstrate competency in each of geography's four main subfields: human, physical, regional, and technical. Competency is normally demonstrated by completion of at least 18 units at the upper-division or graduate level with a 3.0 grade-point average.

# Graduate Standing: Classified

After completion of all prerequisites and removal of deficiencies, the student must develop an approved study plan in consultation with a personal faculty adviser and the graduate program adviser in order to be classified.

All students must complete six units of upper-division technical courses. Three units are prerequisite to classified standing. If the remaining three units were not taken as undergraduate work, they may be included in the study plan.

#### Study Plan

The study plan consists of 30 units of course work distributed as follows:

#### Required Courses

Geography 500 Seminar in Geographic Research (3) Geography 520 Seminar in Physical Geography (3)

Geography 550 Seminar in Human Geography (3)

Geography 500-level seminar (3)

Geography 599 Independent Graduate Research (3)

#### Electives

Upper-division or graduate course work in geography (15 units unless approved for thesis; may include additional Geography 500-level seminars; up to six units from related fields). (12-15)

Thesis (only with department approval)

Geography 598 Thesis (3)

Students must follow one of two plans: Plan A requiring a comprehensive examination or Plan B requiring a thesis.

Plan A requires the development of a specific field of interest and a written, three-part comprehensive exam testing knowledge in human geography, physical geography, and the student's specified area of interest. The examination may be repeated only once. Plan B requires the development of a specific field of interest, a written thesis, and a subsequent oral defense.

All students will follow Plan A unless approval for the thesis option is granted. In order to follow Plan B, the thesis option, students must have the written consent of their thesis supervisor and all members of a thesis committee. Permission to write a thesis may be granted only to students who have (1) achieved a 3.25 grade-point average after 15 units of upper-division and graduate course work and (2) demonstrated proficiency in research and writing skills.

For further details or advisement communicate with the graduate program adviser, Department of Geography.

# Geography Courses

100 World Geography (3)

Introduction to world's geographical regions. Cultural patterns and their evolution in diverse physical environments.

110 Principles of Physical Geography (3)

Major components of the physical environment including landforms, climate, natural vegetation and soils. (CAN GEOG 2)

120 Environment and Change (3)

A geographic analysis of the use and misuse of environment.

160 Culture and Environment (3)

Patterns of settlement and livelihood, and the varying roles of population, social organization, religious and political ideologies, resources and technology. (CAN GEOG 4)

170 The City (3)

Geographic variations in the urbanization process, great world and American cities, and spatial patterns within the city. The city as a built environment.

280A-G Introduction to Geographical Analysis (1)

Prerequisite: minimum of one other core course in geography (i.e., 110 or 160) or consent of instructor. The technical interpretation of physical and human features and activities in the landscape. Majors must take a total of three units.

280A Interpretation of Maps & Aerial Photographs (1)

The uses of maps and aerial photographs in geographic research. Types of data which can be obtained from these sources. Rudimentary measurement techniques.

280C Introduction to Quantitative Methods (1)

Descriptive statistics in geography. Graphs, functions and equations, logarithms and exponents, and an overview of the linear regression model.

280E Library Techniques for Geographers (1)

Library research for geographic inquiry. How and where to find the needed information.

280G Analysis of Weather Maps (1)

The use and analysis of weather maps.

281 Map Reading and Orienteering (2)

Introduction and practical application of skills necessary for using military map products and for military navigation on the ground. A full day, eight-hour Saturday field trip is mandatory. (Same as Military Science 281)

300 Geographical Writing (3)

Prerequisites: junior standing and at least six upper-division units in geography. Experience in and analysis of geography writing: reviews of literature, essays, major research paper, oral presentation. Group and tutorial sessions. Meets the classroom portion of upper-division writing requirement for geography majors.

312 Geomorphology (3)

Prerequisite: Geography 110 or Geology 101 or consent of instructor. Landforms and the processes responsible for their evolution.

323 Weather and Climate (3)

Prerequisite: Geography 110 or consent of instructor. Atmospheric elements and controls, fronts, severe weather, and climatic classification systems.

325 Plant Geography (3)

Prerequisite: Geography 110 or consent of instructor. The characteristics and global distribution of biomes as determined by physical, biological, and historical factors. The role of humans as agents of vegetation change.

329 Physical Geography of the City (3)

Prerequisite: Geography 110 or consent of instructor. Overview of the impact of urbanization on land forms, climate, vegetation, and animals. Planning implications and case studies.

330 California Landscapes (3)

Prerequisite: upper-division standing. The landscapes of California — their environmental characteristics, development patterns and current problems.

332 United States and Canada (3) have become another most states

Prerequisite: upper-division standing. The United States and Canada. The interrelated physical and cultural features that give geographic personality to the regions.

333 Latin America (3)

Prerequisite: upper-division standing. Middle and South America. The interrelationships of the physical and social factors of the area.

336 Europe (3) has a series a soul les nos assignes ade ni basequiq

Prerequisite: upper-division standing. The basic physical and human lineaments of Europe. The elements that distinguish and give character to its major regional divisions.

338 Russia and Its Environs (3)

Prerequisite: upper-division standing. A physical, political and economic geography of Russia and the fourteen other states that have succeeded the Soviet Union.

340 Asia (3)

Prerequisite: upper-division standing or consent of instructor. The physical, human and regional geography of Asia from Pakistan and India through Southeast Asia and the Malay Archipelago to China, Japan and Korea.

344 Africa (3) amos entranomels of betteres are sinebuck IIA

Prerequisite: upper-division standing. The physical, human and regional geography of Africa. Saharan borderlands, East Africa and Southern Africa.

# 346 The Pacific World (3)

Prerequisite: upper-division standing. The physical, cultural and regional geography of Australia, New Zealand, Melanesia, Micronesia and Polynesia.

#### 350 Conservation and Ecology in America (3)

Prerequisite: upper-division standing. Environmental change and resource-use problems. Land ethics, environmental law, public policy and technological impacts.

#### 352 The National Parks (3)

The park system and its evolution as related to conservation, preservation, and recreational land use. Cultural heritage and physical environment.

#### 357 Social Geography — Perception and Behavior (3)

Prerequisite: Geography 160 or consent of instructor. Perception and behavior in various spatial settings in cultural and physical environments. Significance to social planning.

#### 359T Topics in Human Geography (1)

Prerequisite: upper-division standing. Social, cultural, economic or political relationships and the environment. May be repeated for credit.

#### 360 Economic Geography (3)

Prerequisite: upper-division standing. The spatial distribution of economic activities: agriculture, manufacturing industries and tertiary services.

#### 366 Geography of Religion (3)

Prerequisites: Geography 160 or Anthro 102 or Religious Studies 110 or any 3 unit course focusing on religion. An investigation of the function of religion in: perceptions of the world and formation of environmental values; journeys of exploration, discovery and pilgrimage; migration and settlement patterns; spatial organization of sacred space; and, the evolution of religious landscapes. (Same as Religious Studies 366)

#### 370 Urban Geography (3)

Prerequisite: upper-division standing. American metropolitan systems and city-region linkages. Theories and spatial models of social and economic patterns within cities and suburbs; planning implications of these locational patterns.

#### 381 Cartography (3)

Prerequisite: Geography core or consent of instructor. Compilation and construction of maps and graphs as geographic tools. The principles of effective cartographic representation. Instructional fee. (2 hours lecture, 3 hours laboratory)

#### 384 Airphoto and Image Interpretation (3)

Prerequisite: Geography core or consent of instructor. Use of aerial photography, space photography and other remote sensors as tools and research sources. Interpretation of physical and cultural elements of the landscape. (2 hours lecture, 3 hours laboratory)

# 385 Quantitative Geography (3) 12 M unismal 9 meds J 484

Prerequisite: Geography core or consent of instructor. Spatial analysis and geographic application of descriptive and inferential statistics. Use of the electronic computer. (2 hours lecture, 2 hours activity)

#### 422 Regional Climatology (3)

Prerequisite: Geography 323 or consent of instructor. Major climatic regions of the world; the physical factors that produce climatic patterns.

### 425 Tropical Rainforests (3)

Prerequisite: Geography 110 and Geography 325 or equivalent. Discussion/seminar examining the geography, ecology, and human use of tropical rainforests. Focus on the causes and consequences of deforestation, sustainable development, and preserva-

#### 426 The Coastal Environment (3)

Prerequisite: Geography 110, 325 and 312 recommended. An ecological approach to human's impact on coastal environments, emphasizing the West Coast of North America.

### 431 California Environmental Change (3)

Prerequisite: Geography 330 or 350 or consent of instructor. Impact of growth and development on rural and urban California.

### 450 Hazards, Disasters and Planning (3)

Prerequisite: Geography 350 or Geological Sciences 101 or 120. The hazardous environment; impact of hazards and disasters on land utilization and settlement; adaptive strategies in land use planning.

#### 468 Law and Environment (3)

Prerequisite: Geography 350 or consent of instructor. The role of law in the management of resources and in environmental planning. Property and land use regulations.

#### 475 Interpretation of Urban Landscapes (3)

Prerequisites: Geography 357 or 370. In addition, consent of instructor. A geographic view of the city as a landscape composite of structure, space, place and experience. Emphasis is on the European and North American city.

#### 478 Urban Planning Principles (3) (Formerly 472)

Prerequisites: Geography 370 or Poli Sci 320 or consent of instructor. Seminar/discussion on the conceptual themes and legal foundations of American urban planning. Policy areas associated with urbanization and suburbanization processes: land use, economic development, redevelopment, housing systems, neighborhood dynamics and growth management. (Same as Poli Sci 478)

#### 481 Automated Cartography (3)

Prerequisite: Geography 381 or 386 or permission of instructor. Methods and applications of computer-assisted mapping and geographic information systems. Instructional fee. (2 hours discussion, 3 hours lab)

#### 484 Urban Planning Methods (3)

Prerequisite: Geography 478 or Poli Sci 478. Seminar and practicum on methods in urban planning. Analytical techniques and basic data sources. Population forecasting, housing surveys, economic development, fiscal impacts and area revitalization. Individual and team projects. (Same as PolSc 484)

#### 485 Geographic Information Systems (3)

Prerequisite: Geography 481 or equivalent. Integrated computerassisted methods for handling spatial data, including data base design, data conversion and updating, information retrieval, analysis, modeling and mapping. Instructional fee.

### 488 Land Use Analysis (3)

Prerequisites: upper-division standing and consent of instructor. Urban and rural land use and settlement; geographic field problems. Application of geographic techniques and tools to local field studies.

#### 489T Advanced Topics in Geo-Techniques (3)

Prerequisite: Geography 381, or 384, or 385, or 386 or consent of instructor. Selected topics pertaining to the theory and application of various geo-techniques. May be repeated more than once for credit as long as topic discussed is different.

#### 495 Internship in Applied Geography (1-3)

Prerequisite: senior standing and consent of instructor. Students work specified number of hours in appropriate public or private organizations under the supervision of their staff and as coordinated by departmental faculty. Interns meet with instructor by arrangement. May be repeated for a maximum of three units of credit.

#### 499 Independent Study (1-3)

Prerequisite: senior standing. Consent of instructor under whom study will be taken required before enrolling. May be repeated for a maximum of six units of credit.

# 500 Seminar in Geographic Research (3)

Prerequisites: graduate standing and consent of instructor. A required seminar to be taken prior to the development of a thesis. 280G Analysis of Weather Maps (Y)

#### 520 Seminar in Physical Geography (3)

Prerequisite: Graduate standing or consent of instructor. Research in physical geography: methods and contemporary themes. Case studies in climatology, geomorphology, and plant geography.

### 530T Seminar: Selected Topics in Geography (3)

Prerequisite: graduate standing or consent of instructor. Various topics selected from any of the subfields of geography. The topic chosen and a general outline of the seminar are circulated prior to registration. May be repeated for credit.

#### 550 Seminar in Human Geography (3)

Prerequisite: Graduate standing or consent of instructor. Survey of methodology and case studies including: experiential environments; rural landscapes; urban social and economic structure; Geography and public policy; and Third World development.

#### 570 Metropolitan Los Angeles (3)

Prerequisite: Geography 370, 475, or 478 or equivalent. Seminar focusing on the changing spatial structure of metropolitan Los Angeles. Specific topics include economic restructuring, local economic development, the social mosaic, political fragmentation, growth management.

575 Landscape Interpretation (3)
Prerequisite: Geography 357 or 475 or equivalent. A humanistic approach to the nature and meaning of landscape.

#### 597 Project (3)

Prerequisites: Geography 500 and consent of adviser.

#### 598 Thesis (3)

Prerequisites: completion of Geography 500, advancement to candidacy and consent of instructor.

599 Independent Graduate Research (1-3) Open to graduate students by consent of instructor. May be repeated for credit. 370 Urban Geography (3) seesager sequences or product

384 Airphoto and Image Interpretation (3)

[English Airphoto and Image Interpretation (3) [English Airphoto Precequiates Geography core or consent of instructor U.S. of sensit

# Gerontology Programs



Program Director: Jessie Jones Program Office: Ruby Gerontology Center 8

Programs Offered Minor in Gerontology Professional Certificate in Gerontology Emphasis in Gerontology within M.A. Sociology

#### Program Council

Jessie Jones (Director, Gerontology Program), Tony Bell (Sociology), Nancy Segal (Psychology), Roberta Rikli (School of Human Development and Community Service) Chris Cozby (School of Humanities and Social Sciences), Shelley Bartenstein (Extended Education), David Walkington (Biological Science), Robert Koch (Biological Science)

#### Advisers

Students are advised to see a member of the Gerontology Program Council or the Program Director prior to their first semester as a gerontology minor. A flyer describing the minor in greater detail is available in the Gerontology Program office.

#### INTRODUCTION

Gerontology, the study of aging, is a multidisciplinary field that examines the biological, psychological, social and health/fitness aspects of the aging process. The unprecedented growth of the older population has created a growing demand for professionals in a variety of fields who understand issues related to the aging

The minor in gerontology provides students with knowledge and critical understanding of the processes of adult development and aging. It helps to prepare students for a variety of career opportunities in business, government, industry, public and private agencies, health and human services, research and education, and entrepreneurial endeavors. Many career options involve working with healthy and independent older adults, while other positions involve working with older adults who have health problems and other age-related limitations.

#### Ruby Gerontology Center

The Charles L. and Rachel E. Ruby Gerontology Center is a center for education and research in gerontology. Students are encouraged to become involved in the research, conferences and community service activities of the center.

#### Gerontology Scholarship

The Emeriti Memorial Scholarship in Gerontology has been established to honor a full-time continuing junior, senior, or graduate student with a minor or an emphasis in gerontology. Criteria include scholastic achievement and professional purpose.

#### Student Activities

Student involvement in the gerontology program is encouraged through the Gerontology Students Association. In addition, two students are elected to serve with faculty on the Gerontology Programs Council which advises the director of gerontology programs.

#### MINOR IN GERONTOLOGY

The gerontology minor consists of 21 units in the following areas:

Lower Division Requirements (3 units)

Sociology 133 Introduction to Gerontology (3)

Upper Division Requirements (12 units)

Sociology 333 Sociology of Aging (3) Psychology 362 Psychology of Aging (3)

Biology 306 Biology of Aging (3)

Nursing 357 Health Promotion: Adult-Aged Nursing (3)

Upper-Division Electives (6 units, adviser approved)

A 300/400 level course in a related field (3)

A 300/400 level internship in a related field (3)

Possible Electives

English 356 The Literature of Aging (3)

Human Services 385 Program Design and Proposal Writing (3)

Philosophy 314 Medical Ethics (3)

Physical Ed 454 Physical Activity and the Aging Process (3)

Sociology 433 Aging and Social Services (3)

Sociology 446 Aging and Sexuality (3)

Sociology 460 Sociology of Death and Dying (3)

Speech Comm 345 Communication and Aging (3)

Additional elective courses are available in selected departments across campus.

#### Majors That Complement the Minor In Gerontology

The gerontology minor is available and appropriate to strengthen and otherwise complement the course work of students in many majors. Notation of the minor appears on the transcript and the diploma.

#### PROFESSIONAL CERTIFICATE IN GERONTOLOGY

Admission to this program requires a bachelor's degree with a minimum grade-point average of 2.5 in the last 60 semester units. The program requires 18 units total: three units on the social and psychological aspects of aging and 15 units of electives. For further information on specific course content, please contact the Director of Gerontology Programs.

#### **EMPHASIS IN GERONTOLOGY**

An emphasis in gerontology is offered under the Master of Arts in Sociology. Degree requirements are outlined in the Sociology Department section of this catalog.

# Department of History



Department Chair: Frederic Miller

Vice Chair: Nancy Fitch

Department Office: Humanities 815F

Programs Offered Bachelor of Arts in History Minor in History Master of Arts in History

### Faculty upper to super face doop, doing a spring word vous

Gordon Bakken, Leland Bellot, Lauren Breese, Gayle Brunelle, lack Crabbs, Lawrence de Graaf, lack Elenbaas, Nancy Fitch, Arthur Hansen, B. Carmon Hardy, Young Sun Hong, Harry Jeffrey, Samuel Kupper, Sheldon Maram, Frederic Miller, Mougo Nyaggah, David Pivar, Jackson Putnam, Ronald Rietveld, Seymour Scheinberg, Gary Shumway, Ernest Toy, David Van Deventer, Nelson Woodard, James Woodward, Kinji Yada, Cecile Zinberg

Advisers

#### Advisers

General Advisement: Check with departmental office. Undergraduate Coordinator: Ronald Rietveld Graduate Adviser: David Van Deventer

#### INTRODUCTION

Historians engage in serious systematic study of the human past in order to discover therein meaning for people in the present. The student of history may draw upon the subject matter and methods of many academic disciplines. Thus, social history employs the methods of the social sciences, including quantitative analysis, in examining social movements and issues in the past; Psychohistory utilizes the approaches of psychology in the study of the behavior of historically significant individuals and groups; and the development of the various areas of human intellectual and cultural activity, for instance the arts and sciences, are studied to inform us of how and why people have thought as they did.

Lower-division survey courses are designed to convey the broad sweep of past human events and introduce the student to the study of causation and historical source materials. Aspects of the philosophy and methodology of history and the mechanics of writing historical essays are addressed in History 300A and 300B. The study, in greater depth, of specialized historical topics comprises the bulk of the upper division offerings of the department. History majors are required to take History 490, a senior seminar on a special topic in which they are expected to write an original historical essay based chiefly upon the analysis of historical materials that date from the time of the events studied.

The history major is useful for students who: (1) seek a broad liberal arts education with the option to choose more specialized study by geographical region, epoch and focus of inquiry (cultural, social, etc.); (2) plan a career in government service; including positions in United States Government agencies and international organizations overseas; (3) desire to study law; (4) intend to prepare for primary or secondary school teaching; or (5) intend to work for advanced degrees in history in preparation for college teaching. The way would be administed thomas a liberary

#### Credential Information

Teaching credentials require specific study plans and students are urged to seek advice from an adviser early in their course of study. Majors planning to teach at the secondary level should have a study plan approved by the Undergraduate Coordinator or designee by the first semester of their junior year in residence.

#### Oral History

The Oral History Program, under the aegis of the Department of History, is one of the most comprehensive university-based oral history programs in the nation. In addition to offering course work in interviewing techniques, technical processing methodology and community fieldwork, the program administers an assortment of ethnic, political, and other regional projects.

### Pre-Professional Information

Students intending careers in government service or business should seek counsel from an adviser. Those planning to pursue graduate study in history should consult a faculty member of their choice. Those who expect to attend law school should plan their course of study with either Professors Bakken, Bellot, Hardy or Kupper.

#### Prize

Each year the Shirley Weleba prize for the best historical essay submitted is awarded.

#### **BACHELOR OF ARTS IN HISTORY**

The undergraduate major requires a total of 45 units distributed as follows:

#### Introductory Survey Courses (12 units)

Western Civilization (6 units)

History 110A The West and the World to the 16th Century (3)

History 110B The West and the World Since the 16th Century (3)

American History (6 units)

History 170A United States to 1877 (3) and History 170B United States Since 1877 (3)

History 180 Survey of American History (3) or History 190 Survey of American History with Emphasis on Ethnic Minorities (3) and either 170A (3) or 170B (3)

#### Intermediate Requirements (30 units)

History 300A Historical Thinking (3) History 300B Historical Writing (3)

At least 6 units in each of the following areas:

United States History European and Ancient Mediterranean History Latin American, Asian, African, or Middle Eastern History Two upper-division history electives (6)

#### Advanced Requirements (3 units)

History 490T Senior Research Seminar (3)

#### MINOR IN HISTORY

- 1. Lower-division course work 6 or 9 units (including general education)
- 2. Upper-division course work 15 or 18 units (including History 300A)

A total of 24 units is required for the minor in history.

To complete 24 units, the student has the option of taking the last three units either in the introductory requirements or the upperdivision course work.

#### MASTER OF ARTS IN HISTORY

The Master of Arts degree in history is designed to provide a course of study for those whose interests are in teaching, business, government service and the professions as well as for personal enrichment. It offers all the basic requirements for those who intend to pursue a doctoral degree upon the completion of their study at California State University, Fullerton.

#### Prerequisites

Applicants to the Master's program must first fulfill all requirements for admission to graduate standing in the University. A student must have a baccalaureate degree from an accredited

institution with a grade-point average of at least 2.5 in the last 60 semester units and a 3.0 grade-point average in upper division history courses. After fulfilling the university requirements, the applicant's records are sent to the History Department's graduate coordinator for evaluation. Students with deficiencies will be considered for admission only after they have completed courses approved by the coordinator.

#### Study Plan

Each student determines his or her study plan with the graduate coordinator and an adviser in the area of specialization before commencing course work. Two plans are offered: Plan I, in which one specific field of interest is developed, requiring a written thesis or project (with an oral examination taken before the final draft): Plan II, in which written comprehensive examinations in two fields of either (1) American, (2) European or (3) Latin American, Asian, African, or Middle Eastern areas must be taken.

Thirty units of work are required for the master's degree. All students must complete the following courses:

History 502 History and Historians (3) (6) Massar Factors

History 503 Theory and History (3)

History 504 Historical Research (3)

History 520 (3) or 570 Field Seminar (3)

In addition, six more units of 500-level course work must be taken, making a total of 18. The remaining 12 units may be taken in 400 level or graduate courses related to the study plan, at least one of which must be taken in history.

Before advancement to candidacy, a cultural understanding or research skill requirement must be met. This may be fulfilled in a variety of ways: (1) an examination on reading ability in a foreign language, (2) completion of 12 units of comparative studies in other departments appropriate to the student's program, (3) an examination or courses taken in statistics, or (4) courses and certification by the oral history director.

#### EMPHASIS IN PUBLIC HISTORY

Students seeking admission to the Master of Arts in history with an emphasis in public history must meet the same admission requirements as those entering the regular history program. The degree requirements include 30 units of course work and completion of cultural understanding or skill requirement prior to candidacy.

#### Required History Courses (12 units)

History 502 History and Historians (3) History 503 Theory and History (3)

History 504 Seminar in Research & Writing (3)

History 506 Seminar in Public History (3)

Electives (12 units)

Six units in adviser-approved content courses, three of which must be in history, and six units from the following applied History 492 Community History (3)

History 493 Oral History (3)

History 494 Oral History Editing and Indexing (3)

Introduction to Public History (3) History 496

History 593 Historical Agency Administration (3)

### Culminating Experience (6 units)

History 596 Graduate Internship in History (3)

History 597 History Project (3 or 6)

For further information call the Dept. of History.

# History Courses

110A The West and the World to the 16th Century (3) The development of Western and non-Western civilizations from their origins to the 16th century. (CAN HIST 2)

110B The West and the World Since the 16th Century (3) The development of Western and non-Western civilizations from the 16th century to the present. (CAN HIST 4)

150A Western Civilization to the 16th Century: A Comparative Approach (3)

Western civilization from its origin to the 16th century with comparisons to the other major cultures of the world. Particular emphasis upon the thematic approaches to the humanities based upon a study of major texts from Western and non-Western cultures. (Same as Anthropology 150A, Philosophy 150A, and Religious Studies 150A)

170A United States to 1877 (3)\*

The political, social, economic and cultural development of the United States to 1877. Old World background, rise of the new nation, sectional problems, the Civil War and Reconstruction. (CAN HIST 8)

#### 170B United States Since 1877 (3)\*

U.S. History from the late 19th century to the present. Economic transformation, political reform movements, social, cultural, and intellectual changes, and the role of the United States in world affairs. (CAN HIST 10)

180 Survey of American History (3)\*

American history from prehistoric times (before 1492) to the present according to chronological time periods. Basic themes which prevade the entire sweep of the nation's history. Satisfies state requirement in U.S. History. Not available for credit to students who have completed History 190.

<sup>\*</sup>Both History 170A and 170B or History 180 or History 190 must be taken to satisfy the state requirement in U.S. History.

# 190 Survey of American History with Emphasis on Ethnic Minorities (3)\*

A survey of American history from prehistoric times (before 1492) to the present with special emphasis on the role of race and ethnicity. (Same as Afro-Ethnic Studies/Chicano Studies 190). Credit will not be given for both History 180 and 190.

### 230 The Ascent of Man (3)

Science and technology in the development of human culture, especially the development of science in western culture since the 17th century. Scientific concepts, their emergence and the social impact of science.

#### 270 Women in American History (3)

A history of women and feminism in American history from the 19th century through the 20th century. Focus is primarily upon the first women's movement and general changes in the status of women in society.

#### 300A Historical Thinking (3)

The nature of history, history of historical thought, and history's relationship to the humanities and social sciences. Seminar required of all history majors.

### 300B Historical Writing (3)

Prerequisites: History 300A. Research, writing and library usage (including computer-assisted bibliographic searches) as related to history. Meets the classroom portion of the upper-division writing requirement for history majors. Seminar required of all history majors.

# 302A,B Historical Dimension of Liberal Studies (3,3) (Formerly 303A,B)

Prerequisite for 302A: Completion of General Education requirement II.A. Prerequisite for 302B: History 302A. The origins and development of modes of thought and forms of expression in the three core areas of liberal studies, i.e., the natural sciences, the social sciences, and the arts and humanities.

#### 311 World War II (3) (Formerly 410)

A history of World War II: Films, documentaries, lectures and discussion.

#### 321 Molecules and Life (3)

(Same as Chemistry 321)

# 330 History of Economic Development in the First and Third Worlds (3)

Prerequisite: History 110B. Examines economic development in the first and third worlds. Emphasizes the transition from agrarian to industrial economics, the emergence of modern class systems, and the utilization of women and ethnic minorities in modern and traditional economies.

#### 350 History of Latin American Civilization (3)

Prerequisite: completion of General Education requirement II.A. The social, economic, political and cultural evolution of Latin America from the European conquest to the present.

#### 355 History of African Civilization (3)

Examines the social, political, economic and cultural evolution of African civilizations from early times to the present. Credit will not be given for both History 355 and Afro-Ethnic Studies 346.

# 360 Modern Asia: Nationalism & Revolutionary Change (3) Prerequisite: History 110B. A modular analysis of nationalism, revolution and modernization as drawn from the experiences of the countries of China, Japan, India and Southeast Asia.

#### 394 The American Civil War (3)

Prerequisites: History 170A or 180 or consent of instructor. A history of the American Civil War. Both contemporary and current analyses of the war will be amplified by the use of films and slides.

### 395 A History of the First World War (3)

Prerequisite: History 110B or consent of instructor. A history of the Great War stressing the military, social, economic and political aspects of the war. Films, documentaries and special lectures.

# 401 European Intellectual History from 1500 to the Present (3)

Prerequisite: History 110B. The competing ideas in European history from 1500 to the present which have shaped modern European institutions.

#### 402 Ancient and Medieval Britain (3) (Formerly 340)

Prerequisite: History 110A. Britain from 55 B.C. to 1485. The constitutional, institutional and cultural aspects of Roman, Celtic, Anglo-Saxon, Norman and Plantagenet Britain.

#### 403 Tudor-Stuart England (3) (Formerly 341)

Prerequisite: History 110A or 110B. England from the accession of Henry VII to the Glorious Revolution. The political, institutional, ecclesiastical and cultural aspects of the period of the Tudors and Stuarts.

# 404 History of Modern England and Great Britain (3) (Formerly 341)

Prerequisite: History 110B. Modern British history (Glorious Revolution to present). The achievement of constitutional monarchy, transition from agrarian to industrial society, establishment of political democracy and the rise of socialism.

#### 405 History of the Jews (3)

Prerequisite: completion of General Education requirement II.A. The Jewish people from the biblical period to the present. The literature of each period as well as the relationships which exist between the Jewish communities and the societies in which they exist. (Same as Religious Studies 405)

#### 408 History of California (3) (Formerly 383)

Prerequisite: completion of General Education requirement II.B. The political, economic and social history of California from the aboriginal inhabitants to the present; the development of contemporary institutions and the historical background of current issues.

 $<sup>^{\</sup>star}$  Both History 170A and 170B or History 180 or History 190 must be taken to satisfy the state requirement in U.S. History.

# 415A Classical Greece (3)

Prerequisite: History 110A or equivalent. The civilization of ancient Greece. The rise and flourishing of the classical citystates; the literary and philosophic contributions to modern civilization.

### 415B Hellenistic Civilization (3)

Prerequisite: History 110A or equivalent. The Hellenistic synthesis and the new patterns in government, the arts and sciences, philosophy and literature between the Macedonian conquest and the intervention of Rome.

### 417A Roman Republic (3)

Prerequisite: History 110A or equivalent. Roman social and political institutions under the republic.

### 417B Roman Empire (3)

Prerequisite: History 110A or equivalent. Roman imperial institutions and culture with attention to the rise of Christianity. (Same as Religious Studies 417B)

#### 420 The Byzantine Empire (3) (Formerly 419)

Prerequisite: History 110A or equivalent. The East Roman Empire from Constantine to the Ottoman conquest of 1453. Institutional aspects of Byzantine society: church, state, the economy, law and culture. (Same as Religious Studies 420)

### 421A History of the Christian Church to 1025 (3)

Prerequisite: History 110A or equivalent. The Christian Church from its origins in the apostolic preaching through the Middle Ages in both the East and West. (Same as Religious Studies in Buddhism, Jamism, class, caste; early impact (A124) Same as Religious Studies (65A), come as Religious Studies (65A).

#### 421B History of the Christian Church from 1025 to the Present (3)

Prerequisite: History 110B or equivalent. The western church as an institution from 1025 to the present. Orthodoxy, Catholicism and Protestantism in historical perspective. (Same as Religious Studies 421B) robat and dayout approximate defined the contraction

# 423 Medieval History, 300-1350 (3)

Prerequisite: History 110A or equivalent. Medieval civilizations - East European, West European, and Islamic - from the decline of the Roman Empire to the beginning of the Hundred Year's War, with emphasis on cultural, intellectual, and social history. Type supplies the parties and a remaining the last

#### 425A The Renaissance (3)

Prerequisite: completion of General Education requirement II.A. Europe in the 14th and 15th centuries: The development of humanism and capitalism in Italy and their impact on European culture, the rise of Renaissance monarchies, the Renaissance papacy, Christian humanism and Renaissance science and mysticism.

425B The Reformation (3) Prerequisite: completion of General Education requirement II. A. Europe in the 16th and 17th centuries: The impact of the Protestant and Catholic Reformations on European culture, the religious wars, the price revolution and the crises of the nobility, the rise of absolutism and the early modern family. (Same as Religious Studies 425B)

### 427 Enlightenment and Revolution (3)

Prerequisite: History 110A-B. The impact of slavery in the French Caribbean, the rise of nation states, the emergence of Enlightenment thought, feminism, and popular politics during the eighteenth centruy and the French Revolution.

#### 428 The Rise and Decline of Liberal Europe in the 19th Century (3)

Prerequisite: History 110A-B. The impact of industrialization, liberal political reform, and new forms of consumption and production on the daily lives of men and women who lived in nineteenth century Europe. Socialist, nationalist, and feminist responses to social change.

### 429A Europe 1890-1945 (3)

Prerequisite: History 110B. A survey of the cultural, political, and economic history of Europe, 1890-1945.

## 429B Europe Since 1945 (3)

Prerequisite: History 110B. A survey of the cultural, political, and economic history of Europe since 1945.

#### 430 History of Science: Copernicus to the Present (3)

Prerequisites: completion of General Education requirement IIIA.1 and III.A.2. Science from the 16th century to the present especially the scientific revolutions of the 17th and 20th centuries and the interaction between science, technology and culture.

#### 432 From Bismarck to Hitler: Modern Germany, 1870-1945 (3)

Prerequisite: History 110B. This course will both survey the social and political history of Germany from 1871 through World War II and introduce students to current historiographical debates in modern German history.

# 434A Russia to 1890 (3)

Prerequisite: completion of General Education requirement II.A. The establishment of the Russian state at Kiev through the great reforms, the revolutionary movement and reaction of the 19th century. The shaping of contemporary Russia.

#### 434B The Russian Revolutions & the Soviet Regime (3)

Prerequisite: History 110B or equivalent. The 1905 and 1917 revolutions and the subsequent consolidation of power under the Communist regime. The continuity and change in Russian social, political, cultural institutions and foreign policy effected by the impact of Marxist-Leninist-Stalinist ideology.

#### 437 East Europe (3)

Prerequisite: History 110A or equivalent. The political and social history of the central East European peoples.

#### 452 20th-Century Brazil (3)

Prerequisite: History 110B. Social, economic, cultural, and political history of Brazil, with particular emphasis on the post-World War II period.

#### 453 Modern Mexico (3)

Prerequisite: completion of any course which meets the General Education requirements for either II. A. or II. B. The background of the Mexican Revolution of 1910; the Revolution itself from 1910 to 1921; the political, economic and social features; the Revolution as the first of the great upheavals of the 20th century.

#### 455 Latin America Since 1945 (3)

Prerequisite: completion of History 110A-B or consent of instructor. Focuses on political, economic, cultural and social patterns in key Latin American nations from 1945 to the present.

# 456 Introduction to Public History (3) (Formerly 396)

Prerequisites: History 180 or its equivalent. Applications of history to activities outside of teaching and academic research. Will introduce archival work, historic preservation, exhibit interpretation, and historical research and writing in business, government and individual consulting.

#### 458 Southern Africa in the 20th Century (3)

Prerequisite: History 110B or equivalent. Twentieth-century developments in the Union (Republic) of South Africa, Central Africa (the Rhodesias and Nyasaland) and the Portuguese colonies; the political, economic and social ramifications of race relations.

#### 461 Modern Vietnam (3)

Prerequisite: History 110B. A study of the history of Vietnam since 1802. Special emphasis will be placed on the French colonial experience, the Vietnamese struggle against the French from 1946 to 1954, and the American involvement in Vietnam.

#### 462A History of China (3)

Prerequisite: History 110A or equivalent. Chinese history from ancient times to the middle of the 17th century; society, thought, economy and political institutions.

#### 462B History of China (3)

Prerequisite: History 110B or equivalent. Chinese history from the middle of the 17th century to the 1950s. China's internal developments and foreign intrusion, the rise of modern Chinese nationalism and intellectual developments in the Republican period, and the attempts at modernization and the triumph of communism.

#### 462C China Since 1949 (3)

Prerequisite: History 110B or equivalent. History of China from 1949 to the present. The Communist Party, political institutions, ideology, economic modernization and foreign relations of China.

### 463A History of Japan (3)

Prerequisite: completion of the General Education requirement II.A. The social, political, and economic history of Japan until 1868 stressing the Tokugawa era.

#### 463B History of Japan (3)

Prerequisite: History 110B or equivalent. The rise of the modern Japanese state, Japanese imperialism and the postwar era.

#### 464A History of Southeast Asia, 1850-1945 (3)

Prerequisite: History 110B or equivalent. Southeast Asia under the impact of imperialism and the effects of the Pacific War on the European empires.

#### 464B History of Contemporary Southeast Asia (3)

Prerequisite: History 110B or equivalent. Southeast Asia since the Pacific War to the present. The problems of the area and American involvement in Southeast Asia.

#### 465A History of India (3)

Prerequisite: completion of General Education requirement II.A. Survey of the history of India from ancient times through the arrival of Islam to the decline of the Mughul Empire in 18th century. Political developments, social and religious institutions: Hinduism, Buddhism, Jainism, class, caste; early impact of Europeans. (Same as Religious Studies 465A)

#### 465B History of India (3)

Prerequisite: History 110B or equivalent. India from early activities of British in 18th century through Indian Independence in 1948. Political, economic, religious developments: crystallization of British supremacy in South Asia through the Indian Mutiny of 1857; India's struggle for independence; emergence of Gandhi and Nehru. (Same as Religious Studies 465B)

### 466A Islamic Civilization: Arab Era (3)

Prerequisite: History 110A or equivalent. Arab predominance in the Middle East from the rise of Islam to the Mongol invasions of the 13th century. (Same as Religious Studies 466A)

#### 466B Islamic Civilization: Imperial Age (3)

Prerequisite: completion of General Education requirement II.A. The Mongol invasions of the Middle East and their effects. The Ottoman Turkish, Safavid Persian and Moghul Empires down to A.D. 1800. (Same as Religious Studies 466B)

#### 467 The Middle East in the 19th Century (3)

Prerequisite: History 110B or equivalent. Western penetration of the Middle East and the reaction to it, modernization, the growth of nationalist movements and revolutionary disturbances ending with World War I.

#### 468 Middle East in the 20th Century (3)

Prerequisite: History 110B or equivalent. Social, political and economic changes in the Middle East since World War I. The period after World War II and recent independence movements.

#### 469 American Military History (3) (Formerly 393)

Prerequisites: History 180 or equivalent. A survey of America's military experience focusing upon the democratic, industrial, managerial, mechanical, scientific, and social revolutions that have molded military institutions and national policies.

#### 470 American Colonial Civilization (3)

Prerequisite: History 170A or 180 or consent of instructor. Analyzes the creation and development of societies in English North America from 1492-1754; the emergence of economic, social and political patterns and structures in a maturing Anglo-American culture.

#### 471 The United States from Colony to Nation (3)

Prerequisite: History 170A or 180 or consent of instructor. Social, economic, political and intellectual developments in late 18th-century America, the coming of American Revolution, origins of American nationalism, social structure of the new nation, and formation and ratification of the Constitution.

# 472 Jeffersonian Themes in American Society, 1800-1861 (3)

Prerequisite: completion of general education requirements in American History, Institutions and Values. Jeffersonian values and their impact upon the social, political and cultural life of the nation.

#### 473 Democracy on Trial, 1845-1877 (3)

Prerequisite: completion of general education section in American History, Institutions and Values. America's "great national crisis" and the impact of slavery, civil war and national reconstruction upon the democratic process of the republic.

### 474 The United States, 1876-1914 (3)

Prerequisite: History 170B or 180 or equivalent. American industry and its impact upon American life. The populist and progressive reform movements.

#### 475 America Comes of Age, 1914-1945 (3)

Prerequisite: History 170B or 180 or equivalent. Major trends in U.S. domestic policy, foreign policy, economy and society from World War I through World War II. Conflicting values and ideals of domestic policy and U.S. role in world affairs.

### 476 United States Since 1945 (3)

Prerequisite: History 170B or 180 or equivalent. U.S. History from 1945 to the present; the interrelationship of foreign policy, economic prosperity, domestic tensions and protest movements.

#### 477 American Sex Reformers (3) (Formerly 370)

Prerequisite: History 170B or 180 or equivalent. Sex reform and its implication for social thought and behavior. Sex reformers to be considered are Havelock Ellis, Charlotte Perkins Gilman, Alfred Kinsey, William Masters and Virginia Johnson, and David Reuben.

#### 479 The Urbanization of American Life (3)

Prerequisite: completion of General Education requirement II.B. Urban life in America; the colonial town, the western town and the industrial city.

### 480 Development of American Law (3)

Prerequisite: History 170A or 170B. American law; contracts, property, commercial law, criminal law, corporations, torts, civil procedure and the legal profession.

#### 481 Westward Movement in the United States (3)

Prerequisite: completion of General Education requirement II.B. The expansion of the United States population and sovereignty from the eastern seaboard to the Pacific, colonial times to 1900; regional development during the frontier period.

#### 482 Themes in American Thought (3)

Prerequisite: History 170A-B or 180 or 190. An examination of intellectual movements and ideas from the colonial period through the twentieth century. Examples of topics treated are: Puritanism; the Enlightenment influence in America; utopian reform; Darwinism; and Freudian thought.

### 483 American Religious History (3)

Prerequisite: completion of General Education requirement II.B. American religious life and the proliferation of religious organizations as the result of the transplanting of European Christianity in a new environment. (Same as Religious Studies 483)

#### 484 American Legal and Constitutional History (3)

Prerequisite: completion of General Education requirement II.B. Examination of legal and constitutional issues affecting the development of the U.S. Constitution, American law and government. The course will survey developments from English and colonial legal origins to constitutional problems of the post-World War II era.

#### 485 United States Foreign Relations (3)

Prerequisite: History 170B or 180 or equivalent. Relations from 1900 to the present. The United States as a world power in the 20th-century; the search for world order and the diplomacy of the atomic age.

#### 486 United States Cultural History (3)

Prerequisite: completion of General Education requirement II.B. The social and intellectual development of the United States from the Civil War to the present.

#### 487 History of American Parties and Politics (3)

Prerequisite: completion of General Education requirement II.B. Development of American political parties and issues from 1787 to the present. Analyzes the evolution and change in American political parties and the recent impact of mass media upon them.

#### 488 Black America Since 1890 (3)

Prerequisite: History 170B or 180 or equivalent. Black Americans from Booker T. Washington to present; their culture and role in American life and the issues involved in their relations with other segments of the population in various regions.

#### 489A American Social History 1750-1860 (3) (Formerly 386A)

Prerequisite: completion of General Education requirement II.B. A social history of the United States to the Civil War; reform movements, temperance, moral purity, women's rights, anti-slavery, spiritualism and their importance to the formation of a modern society. (Same as American Studies 489A)

#### 489B American Social History 1865-1930 (3) (Formerly 386B)

Prerequisite: completion of General Education requirement II.B. A social history of the United States from the Civil War; reform, social organization and values. The women's movement, censorship, divorce, the child and the limits of reform movements in an organizational society. (Same as American Studies 489B)

#### 490T Senior Research Seminar (3)

Prerequisites: History 300A and 300B or consent of instructor. Directed research seminar with class discussions applied to specific topics and areas as schedule and staff allow. Original research and writing. Required of all history majors.

#### 491T Proseminar in Special Topics in History (3)

Prerequisite: completion of General Education Section I. Intensive study of selected phases or periods of history.

#### 492 Community History (3)

Prerequisite: completion of General Education requirement II.B. Historical development communities in general including the Orange County area. Techniques of gathering and processing local historical data, including oral interviews and other archival materials. The course will survey developments from the same and the same materials.

### 493 Oral History (3) (3) and II saw bloom

Prerequisite: completion of General Education requirement II.B. The utilization of tape recorded interviews to document significant events in 20th-century history. Training will be given in interviewing techniques, specific background research and equipment use, after which students conduct a number of tape recorded interviews.

#### 494 Oral History Editing and Indexing (3)

Prerequisite: senior standing and consent of instructor. Techniques of editing, book and photo layout, and indexing. Focuses on oral history documents but includes other historical and technical editing.

### 498 History Internship (3) and and man all blind 804

The internship program offers work experience related to the history academic program or to areas of public and private employment where any liberal arts major is appropriate.

#### 499 Independent Study (1-3) and vastilian assiromA 204

Open to advanced students in history with consent of department chair. May be repeated for credit. Soushages yissilim

# 502 History and Historians (3)

Prerequisite: consent of instructor. Seminar in historical criticism where students examine modern historians for their methods and methodologies, their abilities to enlarge conceptions of history, and for the manner in which the historical profession receives new knowledge and methods. 1-3041 mod horismA

#### 503 Theory and History (3)

Prerequisite: History 502 or consent of instructor. Seminar introducing student to philosophical issues in history as a humanistic social science, to epistemological considerations of the relationship of history to other disciplines, and to new subdisciplines in history. Required for the M.A.

### 504 Historical Research (3)

Prerequisites: History 502, 503 or consent of instructor. Theory applied to particular historical topics. Students will develop theoretical and analytical frameworks that are effective in explaining the historical problem under consideration. Seminar required for the M.A. maker large and nonuncermi many base

#### 506 Seminar in Public History (3)

Prerequisite: consent of instructor. Seminar in sources, themes, writing and formats used by historians working outside the classroom. Content will vary with instructor and will emphasize application of historical methods to various sectors of community history. Alternative to History 570/520 requirement for M.A.

#### 520 Seminar in European History (3)

Prerequisite: consent of instructor. A seminar in which students will utilize primary sources in writing research papers in European History.

# 570 Seminar in American History (3)

Prerequisite: consent of instructor. A seminar in which students will utilize primary sources in writing research papers in American History.

#### 593 Historical Agency Administration (3)

Prerequisite: consent of instructor. Practicum in various aspects and issues of administering organizations relating to history, e.g., museums, historical parks. Will cover financial, personnel and public relations aspects, the role of various agencies in the historical profession.

#### 596 Graduate Internship in History (3)

Prerequisite: classified graduate status. Professional-level internship in historical work. Usually precedes History 597, Project, and constitutes research phase of main graduate exercise as well as preparation for post-graduate career. This course may be repeated for credit.

#### 597 History Project (3 or 6)

The editing of a significant body of primary source materials, including a critical and interpretive introduction as well as appropriate reference and explanatory notes. Foreign sources will normally be translated into English.

#### 598 Thesis (3 or 6) A mobiled Protection of margor 9

Prerequisite: consent of instructor. May be repeated for credit.

#### 599 Independent Graduate Research (1-3)

Open to graduate students in history with consent of department chair. May be repeated for credit. Minor in Letin American Studiest stort herealst group what

# Latin American Studies Program

Program Coordinator: Sheldon L. Maram Program Office: McCarthy Hall 103

Programs Offered Bachelor of Arts in Latin American Studies Minor in Latin American Studies

#### Program Council

Oswaldo Arana (Foreign Languages), Nancy Baden (Foreign Languages), Warren Beck (History), Ruth Capelle (Art), Isaac Cardenas (Chicano Studies), James Dietz (Economics), Roger Dittman (Physics), Dagoberto Fuentes (Chicano Studies), Ana Garza (Education), Ron Harmon (Foreign Languages), William Hobbs (Criminal Justice), Arturo Jasso (Foreign Languages), Leroy Joesink-Mandeville (Anthropology), Paul Kane (Education), Jackie Kiraithe (Foreign Languages), John Lafky (Economics), Irene Lange (Marketing), Sheldon Maram (History), Lon McClanahan (Biological Science), Michael Mend (Sociology), Adolfo Ortega (Chicano Studies), Ervie Peña (Foreign Languages), Joseph Platt (Chicano Studies), Marlene de Rios (Anthropology), Gerald Rosen (Sociology), Robert Voeks (Geography), Bruce Wright (Political Science).

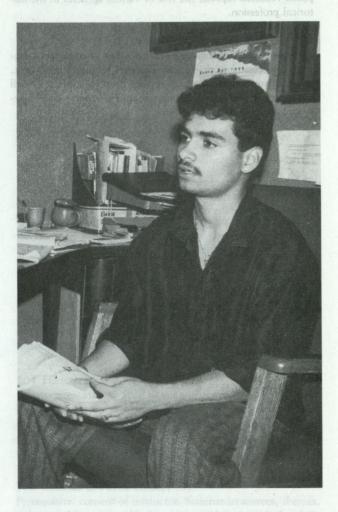
#### Adviser

Undergraduate: Sheldon L. Maram

#### INTRODUCTION

Latin America is our closest neighbor and is an underdeveloped region with vast potential. Countries range in size from the small islands of Puerto Rico and the Dominican Republic to resourcerich Brazil, which is larger than the continental United States. Most of these countries face fundamental economic and social problems which must be solved if extremes of wealth and poverty are to be overcome, more jobs are to be available, health care is to be improved, illiteracy is to be conquered, and democracy and social justice are to prevail.

Students of Latin American studies learn about these problems and begin to develop the knowledge necessary to contribute to helping our Latin American neighbors help themselves. By pursuing a broad yet in-depth course of study, Latin American studies students are well equipped to enter many fields and occupations — as teachers in the United States or Latin America, as business people sensitized to Latin American history and culture, as Peace Corp volunteers or missionaries, or as journalists, lawyers, doctors where contact with Latin America or Latin Americans in the United States is important.



The Latin American studies major is designed to provide an indepth, interdisciplinary understanding of Latin America. Majors develop language proficiency in both Spanish and Portuguese and have a broad range of courses from which to choose in anthropology, economics, history, geography, political science, and foreign languages and literature. The major is well-suited for: (1) students who wish to pursue careers which require residence in or knowledge of Latin America (e.g., business, journalism, government); (2) those who plan to teach Spanish and/or social sciences in the secondary schools; and (3) students who wish to pursue graduate work in Latin American studies or other disciplines where a Latin American specialization would be helpful (e.g., political science, economics, history).

## **BACHELOR OF ARTS IN LATIN AMERICAN STUDIES**

Foundation Courses

All majors should develop a language proficiency level equivalent to Spanish 204 and Portuguese 102.

Students with no language background should take:

Spanish 101 Fundamental Spanish — A (5)

Spanish 102 Fundamental Spanish — B (5)

Spanish 203 Intermediate Spanish — A (3)

Spanish 204 Intermediate Spanish — B (3)

Portuguese 101 Fundamental Portuguese — A (4)

Portuguese 102 Fundamental Portuguese — B (4)

A student with a knowledge of Spanish and/or Portuguese may be able to meet part or all of the foundation course requirements by taking a test administered by the Department of Foreign Languages and Literatures.

#### Required Fields of Study

Language (3 units)

Spanish 301 Advanced Conversation and

Composition (3) or

Portuguese 317 Advanced Conversation and

Composition (3)

History and Culture (9 units)

Spanish 316 Introduction to Spanish American

Civilization (3)

or Portuguese 325 Contemporary Brazilian Civilization (3)

and History 350 History of Latin American

Civilization (3)

and three additional units in upper-division Latin American history

Social Science (6 units) selected from two departments

Anthro 324A The Ancient Maya (3)

Anthro 324B Aztecs and Their Predecessors (3)

Anthro 325 Peoples of South America (3)

Economics 333 Economic Development: Analyses and Case Studies (3)

Economics 334 Economics of Latin America and the Caribbean (3)

Geography 333 Latin America (3)

Poli Sci 430 Government and Politics of a Selected Nation-State (3)\*

Poli Sci 431 Government and Politics of a Selected Area (3)\*

Poli Sci 447 Revolutions in Latin America (3)

Poli Sci 452 Foreign Policy of a Selected Country or Group of Countries (3)\*

# Elective Fields of Study

Twelve units selected from three or more of the following groupings chosen in consultation with the program coordinator:

Anthro 324A The Ancient Maya (3)

Anthro 324B Aztecs and Their Predecessors (3)

Anthro 325 Peoples of South America (3)

Chicano 302 Ancient Mexican Culture (3)

Chicano 403 Cultural Differences in Mexico and the Southwest (3)

Chicano 453 Mexico Since 1906 (3)

Portuguese 317 Advanced Conversation and Composition (3) or Spanish 301 Advanced Conversation and Composition (3)

Portuguese 320 Introduction to Luso-Brazilian Culture and Civilization (3)

Portuguese 325 Contemporary Brazilian Civilization (3) or Spanish 316 Introduction to Spanish-American Civilization (3)

Spanish 416 Contemporary Spanish-American Culture (3)

#### Fine Arts and Literature

Art 460B Pre-Columbian Art (3)

Chicano 430 Evolution of Mexican Literature (3)

Chicano 433 Mexican Literature Since 1940 (3)

Portuguese 441 Brazilian Literature (3)

or Spanish 441 Spanish-American Literature (3)

Spanish 466 Intro to Spanish Linguistics (3)

Spanish 485 Senior Seminar: Topics in Spanish American Literature (3) (with consent of program coordinator)

#### History and Politics

History 452 20th-Century Brazil (3)

History 453 Modern Mexico (3)

History 455 Latin Amer Since 1945 (3)

Poli Sci 430T\* Government and Politics of a Selected Nation-State (3)

Poli Sci 431T\* Government and Politics of a Selected Area (3)

Poli Sci 447 Revolutions in Latin America (3)

Poli Sci 452T\* Foreign Policy of a Selected Country or Group of Countries (3)

<sup>\*</sup>Latin American focus only.

Geography and Economics and Economics Assessment of the Community of the C

Economics 333 Economic Development: Analyses and Case Studies (3)

Economics 334 Economics of Latin America and the Caribbean (3)

Geography 333 Latin America (3)

Latin American Studies

Latin Amer Studies 399 Directed Studies (1-3) of Countries (3)

#### MINOR IN LATIN AMERICAN STUDIES

The minor in Latin American studies is designed to complement other majors for which a focus on Latin America can be beneficial (e.g., history, international business, communications, Spanish, economics and political science). Prospective secondary teachers may find this minor particularly attractive. The minor requires proficiency in either Spanish or Portuguese, as defined above for the major; Latin Amer Studies 200; 3 units of cultural history (History 350 or Spanish 316 or Portuguese 325); and 12 units of approved electives from at least three departments listed below:

Anthro 324A The Ancient Maya (3)

The Aztecs and Their Predecessors (3) Anthro 324B

Anthro 325 Peoples of South America (3)

Ancient Mexican Culture (3) Chicano 302

Cultural Differences in Mexico and the Chicano 403

Southwest (3)

The Evolution of Mexican Literature (3) Chicano 430

Mexican Literature Since 1940 (3) Chicano 433

Mexican Intellectual Thought (3) Chicano 440

Chicano 453 Mexico Since 1906 (3)

Economics 333 Economic Development: Analysis and Case Studies (3)

Economics 334 Economics of Latin America and the Caribbean (3) Company of the constitution of t

Spanish in the Business World (3) Spanish 310

Introduction to Spanish-American Spanish 316

Civilization (3)

Spanish 416 Contemporary Spanish-American Culture (3)

Spanish 441 Spanish-American Literature (3)

Spanish 485T Senior Seminar: Topics in Spanish-American Literature (3)

Portuguese in the Business World (3) Portuguese 310

Portuguese 325 Contemporary Brazilian Civilization (3)

Geography 333 Latin America (3)

20th-Century Brazil (3) History 452

History 453 Modern Mexico (3)

Latin America Since 1945 (3) History 455

Poli Sci 430\* Government and Politics of a Selected Nation-State (3)

Government and Politics of a Selected Poli Sci 431\* Area (3)

Poli Sci 447 Revolutions in Latin America (3)

\*Latin American focus only.

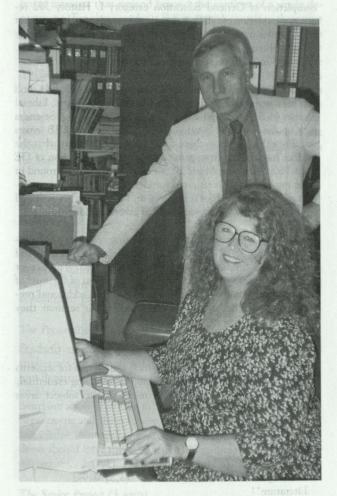
Poli Sci 452\* Foreign Policy of a Selected Country or Group of Countries (3)

# Latin American Studies Course

399 Directed Study (1-3)

Prerequisite: approval of program coordinator. Supervised individual or small group study as an elective. May be repeated for credit with different content.

# Liberal Studies Program



Program Coordinator: Ronald Clapper Program Office: McCarthy Hall 103

Programs Offered Bachelor of Arts in Liberal Studies

### Faculty

Ronald Clapper, Albert Vogeler

### Adjunct Faculty

Carol Copp (Sociology, Jane Hipolito (English and Comparative Literature), James Hofmann (Philosophy), Roger Joseph (Anthropology), Stewart Long (Economics), Lorraine Prinsky (Sociology), Diane Ross (Health, Physical Education and Recreation), Howard Seller (English and Comparative Literature), Terri Snyder (American Studies), Bradley Starr (Religious Studies), Bruce Weber (Chemistry and Biochemistry), James Woodward (History)

### Program Council

Gayle Brunelle (History), Gaylen Carlson (Geological Sciences), Ronald Clapper (Coordinator), Carol Copp (Sociology), Gerald Gannon (Mathematics), Jane Hipolito (English and Comparative Literature), James Hofmann (Philosophy), Emmett Long (Emeritus), Stewart Long (Economics), Terry Snyder (American Studies), Bradley Starr (Religious Studies), Robert Strain (Speech Communication), Albert Vogeler (Liberal Studies), Bruce Weber (Chemistry)

### Advisers

Undergraduate: Ronald Clapper, Gerald Gannon, Jane Hipolito, James Hofmann, Albert Vogeler

### INTRODUCTION

Liberal Studies is an interdisciplinary program that integrates knowledge from the humanities and arts, the natural sciences, and the social sciences. Some core courses trace the historical development of these areas of knowledge in their intellectual and cultural context. The broad framework of these courses will enable students to see the whole range of human knowledge and provide them with a meaningful context in which to understand any new knowledge they will encounter. Other core courses compare and contrast the methods and underlying assumptions of the humanities and arts, the natural sciences, and the social sciences, and explore the ways in which they communicate. The critical thinking and communication skills these courses develop provide students with the self-confidence that comes from being able to express one's ideas clearly and effectively both orally and writing. The core courses use a combination of lecture, discussion, and seminar to make the student not only a well-rounded. well-educated person, but also a more independent thinker and a more creative human being.

The major in Liberal Studies is designed for students who desire the broadest possible liberal education: (1) as preparation for teaching all subjects in the elementary school classroom; (2) as an alternative approach to careers in business; (3) as preprofessional preparation for entry into professional schools in the health sciences, law, ministry, etc.; (4) as a means of obtaining specific occupational requirements that cannot be met from course work in a single department; (5) and as a source of personal growth and development.

### Awards in Liberal Studies

The Outstanding Elementary Education Plan Student Award and the Outstanding Thematic Plan Student Award go to the outstanding graduating senior in each plan.

### Multiple Subjects Waiver

In addition to completing their B.A. in Liberal Studies, students seeking a Multiple Subjects (Elementary) Credential need to enter a state-approved Multiple Subjects Credential Program. As part of the Multiple Subjects Credential Program requirements, students must either (1) complete an approved Waiver Program at CSUF or another institution or (2) take the state-approved exam based on the content of the Waiver Program. Students intending to meet the CSUF Multiple Subjects Waiver requirements while they are taking course work in the Liberal Studies major will need to consult with a liberal studies adviser.

### BACHELOR OF ARTS IN LIBERAL STUDIES

The 24 units of core courses are required of all majors. In addition, students must take the 27-unit option under either the Elementary Education Plan or the Thematic Plan. Each course counted for the major must be completed with a grade of C or higher.

#### Core Courses (24 units)

Speech Communication 301 Liberal Studies in Communication Processes (3)

History 302A Historical Dimension of Liberal Studies (3)\* History 302B Historical Dimension of Liberal Studies (3)\* Liberal Studies 303 Liberal Studies in the Humanities and Arts (3)

Liberal Studies 304 Liberal Studies in the Sciences (3) Liberal Studies 305 Liberal Studies in the Social Sciences (3) Philosophy 401 Knowledge in the Arts and Sciences (3)

One of the following Senior Seminars:

Liberal Studies 486 Senior Seminar in the Humanities and Arts (3)

Liberal Studies 489 Senior Seminar in Gender Issues (3) Senior Seminar in Great Books (3) Liberal Studies 490

### Sequence of Core Courses of a non-tiene and allow a resource abivora

Because the core curriculum is designed as an integrated whole and builds upon the student's general education, there is an order in which these courses need to be taken and there are certain prerequisites for them. Liberal Studies in Communication Processes and the Historical Dimension of Liberal Studies come first. The only prerequisite for Speech Communication 301 is the completion of General Education category I. History 302 requires completion of GE II. A, but transfer students who have not had a course in western civilization or world history will be able to take History 110A (110B) and 302A (302B) concurrently. History 302A is a prerequisite for History 302B.

History 302B is a prerequisite for Liberal Studies 303, 304, and 305 because Liberal Studies in the Humanities and Arts, Liberal Studies in Science, and Liberal Studies in the Social Sciences pick up the historical developments where History 302B leaves off. Since the courses in these three areas also integrate what the student has learned from general education, completion of GE III.B.1&2 (including Music 101 or an equivalent background in basic music theory) is required for Liberal Studies 303; completion of GE III. A. 1&2&4 is required for Liberal Studies 304; and completion of III.C.1 is required for Liberal Studies 305.

Methods of Inquiry and the Senior Seminar come last. Philosophy 401 requires the completion of Liberal Studies 304 and either Liberal Studies 303 or Liberal Studies 305. The Senior Seminar requires senior standing, the completion of 90 units of college work. Some of the senior seminars have additional prerequisites. Students may take whichever senior seminar they prefer.

### Elementary Education Plan (27 units)

The Elementary Education Plan, which is designed for students seeking an elementary or multiple subjects teaching credential, provides academic preparation in many of the subject areas taught in the elementary school.

English 301 Advanced College Writing (3)\*\* English 303 Structure of Modern English (3)\*\* English/Comparative Literature 110-111 (3,3) or Comparative Literature 324-325 (3,3) World Literature \*\*

Mathematics 303A,B Fundamental Concepts of Elementary Mathematics (3,3)\*\*

Science Ed 410 Physical Science Concepts (3) or Science Ed 453 Life Science Concepts (3)\*\*

Upper-division social science electives in Afro-ethnic studies,\*\*\* American studies,\*\*\* Anthropology, Chicano studies, \*\*\* Economics, Geography, History, Political Science, Psychology, or Sociology (3 units)

Upper-division humanities and arts electives in Afro-ethnic studies, \*\*\* American studies, \*\*\* Art, Chicano studies, \*\*\* Dance, Foreign Languages and Literatures, Music, Philosophy, Religious Studies, or Theatre (3 units)

<sup>\*</sup>These courses will also count toward meeting the upper-division requirement for

general education.

"In exceptional cases substitutes may be made with the approval of the program

<sup>\*\*</sup>Some of this department's courses are social sciences and some are humanities.

### Thematic Plan (27 units)

The Thematic Plan is designed for students who have genuinely broad interests that expand beyond the confines of a single department. For these students the ability to construct their own area of interdisciplinary study by taking advanced course work in several disciplines may be more beneficial than restricting their study to one of the various majors offered by the university. The Thematic Plan does not duplicate any existing major, and does not consist of a random collection of courses. The Thematic Plan is a well-thought-out, highly individualized group of courses that, even though they come from various departments, have a common subject, focus, or interest. Thematic Plan students may center their course work on an academic interest or may select courses that prepare them for later professional training or for specific careers.

Upper-Division Writing Course (3 units)

English 301 Advanced College Writing (3)

With the approval of a liberal studies adviser, students may substitute one of the upper-division writing courses that the University Board on Writing Proficiency has approved for other majors if it is more relevant than English 301 to the student's personalized coordinated program.

### The Personalized Coordinated Program (21 units)

Students are allowed to select, in consultation with a liberal studies adviser, 21 units of upper-division course work from various departments for the purpose of pursuing an interdisciplinary problem, theme, or issue. To insure breadth of knowledge, students are allowed to take (a) no more than 9 units from a single department and (b) no more than 15 units from a single area of knowledge (humanities and arts, science, social sciences). Students should have their study plan, approved by a liberal studies adviser prior to taking course work.

### The Senior Project (3 units)

To aid Thematic Plan students in integrating and synthesizing the knowledge from the specially selected courses in their personalized coordinated program, they will be required to complete a senior project (such as a thesis or a creative work) by enrolling in three units of independent study (499) under a professor of their own choosing. Since that professor will be responsible for evaluating the project, students sign up for independent study in that professor's department. Before asking a professor to direct their project, however, students should see a liberal studies adviser for help in preparing a project proposal. Once the professor who has agreed to direct the project has signed the project proposal form, a liberal studies adviser must also sign the proposal form, indicating that the project is relevant to the personalized coordinated program.

### Liberal Studies Courses

303 Liberal Studies in the Humanities and Arts (3) (Formerly 306)

Prerequisite: Music 101, History 302B, and completion of the General Education requirement III. B. 2. An interdisciplinary approach to the humanities and arts which examines their purposes, structures and major developments in this century.

### 304 Liberal Studies in the Sciences (3) (Formerly 307)

Prerequisite: History 302B and completion of the General Education requirement III. A. 1., 2., and 4. An interdisciplinary introduction to the character and aims of 20th century science, current theories and knowledge, and the role of science and technology in contemporary society.

### 305 Liberal Studies in the Social Sciences (3) (Formerly 308)

Prerequisite: History 302B and completion of the General Education requirement III.C.2. An interdisciplinary introduction to modern social science in which major thinkers, ideas, movements and problems will be approached historically, comparatively and analytically.

### 486 Senior Seminar in Humanities and Arts (3)

Prerequisite: senior standing and Liberal Studies 303. Intensive interdisciplinary study of selected topics in the humanities and arts. Integrates and builds upon previous classes in Liberal Studies and emphasizes student-led discussions.

### 489 Senior Seminar in Gender Issues (3)

Prerequisite: senior standing and Liberal Studies 305. Intensive interdisciplinary study of gender issues in the modern period. Emphasizes student-led discussions.

#### 490 Senior Seminar in Great Books (3)

Prerequisite: senior standing and History 302A, B. Intensive study of important books from early civilization to the present. Develops critical reading of texts, clear expression of ideas and integration of knowledge. Emphasizes student-led discussions.

# Department of Linguistics

Department Chair: Merrill Ring

Department Office: Education Classroom 622 Laboratory for Phonetic Research: Education

Classroom 630B.

Programs Offered (#) some sole of an applicate formed 1 +00

Bachelor of Arts in Linguistics

Minor in Linguistics

Master of Arts in Linguistics

### Faculty

Angela Della Volpe, Alan Kaye, Franz Müller-Gotama, James Santucci

### Adjunct Faculty

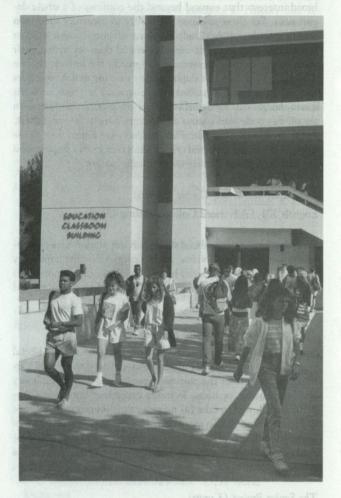
Nancy Baden (Foreign Languages), Ralph Beckett (Speech Communication), Theresa Boggs (Speech Communication), Samuel Cartledge (Foreign Languages), Janet Eyring (Foreign Languages), Ronald Harmon (Foreign Languages), Maria Montaño-Harmon (Secondary Education), Jacqueline M. Kiraithe (Foreign Languages), Kurt P. Kitselman (Speech Communication), Thomas P. Klammer (English), Edith C. Li (Speech Communication), Keiji Matsumoto (Foreign Languages), Marcial Prado (Foreign Languages), Ronald Riggio (Psychology), Glendon Riley (Speech Communication), Otto J. Sadovszky (Anthropology), Muriel R. Schulz (English), William R. Smith (Psychology), Nobuko Sugamoto (Foreign Languages), Arden Thorum (Speech Communication), A. Lynn Williams (Speech Communication), Richard Lee Wiseman (Speech Communication)

### Advisers

Undergraduate: Angela Della Volpe Graduate: Franz Müller-Gotama

### INTRODUCTION of knowledge Emphasizes of North and Interesting

Linguistics is the study of language. Like other rapidly developing fields, linguistics resists simple classification into one of the traditional categories of academic disciplines. As one of the humanities, linguistics is concerned with the historical development of a particular language or language family. As a social science, linguistics may be related to anthropology in describing language as part of culture; or it may be related to psychology in describing language as a kind of human behavior. One branch of linguistics, phonetics, may even be considered a natural science, related to the physical science of acoustics and the biological sciences of anatomy and physiology. As an applied science, linguistics has found many applications in fields as far apart as language pedagogy, speech therapy, and computer programming. Finally, linguistics may be considered a formal science in its own right, related to mathematics and logic.



472 Linguistics

The interdisciplinary aspects of this study are reflected in the organization of the program which offers a core of general linguistics courses and draws upon linguistically related courses in other departments.

Graduates use the major in linguistics for a liberal arts base in language related fields. With advanced work, they enter teaching, language research, translation, and linguistic field work, as well as such professional fields as law or such applied fields as teaching English as a second language.

The Bachelor of Arts is for students with an exceptional interest in and aptitude for the study of the systems of human communication. The essential relationships between language and thought and language and culture, the structure of foreign languages as well as English, the historical study of language, and formal techniques and methodologies are the theoretical foundations of linguistic analysis.

The M.A. in Linguistics builds upon a foundation of undergraduate study in linguistics and such allied areas, as foreign languages, English language, anthropology, speech communication and related areas in psychology and philosophy. The program emphasizes strong preparation in a core of general linguistics and offers the opportunity to specialize in one of several areas.

The relationship between linguistics and other disciplines and the application of the techniques, findings and insights of that science to such activities as language teaching are treated in interdisciplinary courses and seminars.

#### Student Awards

Each year the department honors an outstanding undergraduate student with the Award for Excellence in Undergraduate Linguistics. The Graduate Prize in Linguistics is awarded annually to a student in the M.A. program in recognition of a distinguished graduate project selected for publication in the department's Seminar Paper Series.

### BACHELOR OF ARTS IN LINGUISTICS

### Language Requirement Managed Reported Oct About

Linguistics majors are required to take two progressive semesters of any two languages or four progressive semesters of any one aghish 599 Independent Graduate Research . spangnal

### Core Requirements (15 units)

Linguistics 351 Introduction to Linguistic Phonetics and Phonology (3)

Linguistics 406 Descriptive Linguistics (3)

Linguistics 408 Syntax (3)

Linguistics 412 Sociolinguistics (3) and the administration of the second secon

Linguistics 430 Historical Linguistics (3)

### Electives (18 units)

Two must be from linguistics upper-division courses other than those listed as required above; and four may be selected from linguistics upper-division courses or from the courses listed below:

Child Development 312 Human Growth and Development (3)

English 303 The Structure of Modern English (3)

English 440 History of the English Language (3) Foreign Languages, any upper division course (3)

Philosophy 368 First Course in Symbolic Logic (3)

Physics 305 Acoustics (4)
Psychology 415 Cognitive Processes (3)

Students must consult with an adviser in linguistics before establishing their individual programs of study. Other courses in the university may be taken as electives with the permission of the Courses taken to remove manufactive deficiencies may a resivba

### MINOR IN LINGUISTICS

The minor in linguistics provides a solid introduction to the scientific study of language for students in a related major field. Students are required to take: Linguistics 106, Linguistics 351 and Linguistics 406. In addition, 12 units in elective courses selected with the approval of the undergraduate adviser are reguired. It is thus possible to tailor the minor to individual needs in rounding out a course of study in the student's major area of specialization.

#### LABORATORY OF PHONETIC RESEARCH

The Laboratory houses the department's sound spectrograph, recording equipment, and an extensive collection of tape recordings of lesser known languages and dialects. It is also the editorial home of the California Linguistic Newsletter.

### MASTER OF ARTS IN LINGUISTICS

### Admission to Graduate Standing: Conditionally Classified

Requirements include a bachelor's degree from an accredited institution and a minimum GPA of 2.50 in the last 60 semester units attempted.

## Graduate Standing: Classified

Classified graduate standing requires a bachelor's degree in Linguistics or a related field from an accredited institution with at least 3.0 grade-point average in the major courses provided that a minimum of 24 units of upper-division course work is included. If the student holds a bachelor's degree in a major other than Linguistics, 24 units of upper-division course work in Linguistics with a minimum of 3.0 grade-point average must have been completed. Included among the 24 units of course work must be the following courses or their equivalents:

Linguistics 351 Introduction to Linguistic Phonetics and Phonology (3)

Descriptive Linguistics (3) Linguistics 406

Linguistics 408 Syntax (3)

Linguistics 412 Sociolinguistics (3)

Linguistics 430 Historical Linguistics (3)

A student who has not completed one or more of the preceding four courses may enroll in the required course(s) concurrently with graduate course work in the program. If the student lacks the prerequisite number of Linguistics courses, they must be made up before commencing the master's degree program, with at least a 3.0 GPA in such makeup course work. In the event that the student's GPA in prerequisite Linguistics courses is less than 3.0, six to nine units of probationary, adviser-approved course work may be assigned. If the GPA in these probationary courses is 3.0 or better, the student may be classified. Some courses taken to make up qualitative deficiencies may be credited toward the M.A., if completed with a grade of B or better, and if applicable to the student's particular study plan. Courses taken to remove quantitative deficiencies may not be applied to the M.A. program.

Knowledge of one foreign language is required (equivalent of Foreign Languages 317 course). Students without course work in a foreign language may demonstrate proficiency by a score of average or better on the MLA-ETS Proficiency Examination for Advanced Students. Work toward fulfillment of this requirement may be taken concurrently with graduate work in linguistics.

Modifications of certain prerequisite requirements may be permitted in exceptional circumstances.

A study plan must be developed and approved for admission to classified graduate standing.

### Study Plan Course Requirements

Units Course work in descriptive and historical Linguistics 501 Research Methods and Bibliography (3)

Linguistics 505 Phonological Analysis (3)

Linguistics 507 Grammatical Analysis (3)

Linguistics 508 Theories of Syntax (3) Linguistics 530 Historical Linguistics (3)

Course work selected from any one of the following six areas of specialization, including other courses in the university with the approval of the adviser .....

Applied Linguistics

Structure of Modern English (3) English 303

FL Ed 468 TESOL Contrastive Analysis (3)

FL Ed 527 Theory of Bilingual Language

Acquisition (3)

French 466 Intro to French Linguistics (3)

French 599 Independent Graduate Research (1-3)

German 466 Intro to German Linguistics (3)

German 599 Independent Graduate Research (1-3)

Linguistics 305 English Language in America (3)

Linguistics 307 Speech and Language

Development (3)

Linguistics 416 Anthropological Linguistics (3)

Linguistics 443A or B Principles of Teaching English

to Speakers of Other Languages (3)

Linguistics 580T Special Topics in Linguistics (3)

Linguistics 596 Internship in Applied Linguistics (3)

Linguistics 599 Independent Graduate

Research (1-3)

Spanish 466 Introduction to Spanish Linguistics (3)

Spanish 467 Dialectology: Current Trends in Modern

Spanish (3)

Spanish 468 Spanish-English Contrastive

Analysis (3)

Spanish 599 Independent Graduate Research (1-3)

### Anthropological Linguistics

Anthro 599 Independent Graduate Research (1-3)

FL Ed 468 TESOL Contrastive Analysis (3)

Linguistics 416 Anthropological Linguistics (3)

Linguistics 580T Special Topics in Linguistics (3)

Linguistics 592 Field Methods in Linguistics (3)

Linguistics 599 Independent Graduate

Research (1-3)

### Analysis of Specific Language Structures

FL Ed 468 TESOL Contrastive Analysis (3)

French 466 Intro to French Linguistics (3)

German 466 Introduction to German Linguistics (3)

Japanese 466 Introduction to Japanese

Linguistics (3)

Spanish 466 Introduction to Spanish Linguistics (3)

Japanese 468 Japanese-English Contrastive Analysis (3)

French 500 Graduate Seminar: Advanced Structure and Style (3)

German 500 Graduate Seminar: Advanced Structure

and Style (3)

Spanish 500 Graduate Seminar: Advanced Structure and Style (3) A STALL METHAGO ROLLHOAD

French 530 Historical Linguistics (3)

German 530 Historical Linguistics (3)

Spanish 530 Historical Linguistics (3)

English 580T Special Topics in Linguistics (3)

English 599 Independent Graduate Research (1-3)

Spanish 599 Independent Graduate Research (1-3)

French 599 Independent Graduate Research (1-3)

German 599 Independent Graduate Research (1-3)

Linguistics 580T Special Topics in Linguistics (3)

Linguistics 592 Field Methods in Linguisitics (3)

Linguistics 596 Internship in Applied Linguistics (3)

Linguistics 599 Independent Graduate Graduate

Research (1-3)

### Experimental Phonetics (Englanding the Language Page 1994)

Linguistics 450 Acoustic Phonetics (3) Linguistics 599 Independent Graduate Research (1-3)

Physics 305 Acoustics (4)

Speech Comm 599 Independent Graduate Research (1-3)

#### Communication and Semantics

Anthro 599 Independent Graduate Research (1-3) Linguistics 375 Introduction to Philosophy of

Language (3)

Linguistics 416 Anthropological Linguistics (3)

Linguistics 417 Psycholinguistics (3)

Linguistics 442 Changing Words: History, Semantics

and Translation (3)

Linguistics 580T Special Topics in Linguistics (3)

Linguistics 599 Independent Graduate

Research (1-3)

Speech Comm 599 Independent Graduate Research (1-3)

### Disorders of Communication

Linguistics 307 Speech/Language Development (3) Linguistics 369 Language, Sex Roles, and the Brain (3) Linguistics 417 Psycholinguistics (3) Linguistics 580T Special Topics in Linguistics (3) Linguistics 599 Independent Graduate Research (1-3)

Speech Comm 461 Audiology and Audimetry (3)

Speech Comm 471 Clinical Phenology (3)

Speech Comm 472 Voice and Cranio-Facial

Disorders (3)

Speech Comm 475 Fluency Disorders (3)

Speech Comm 599 Independent Graduate

Research (1-3)

### Course work in linguistics or a related field .....

Linguistics 59	7 Project	istics	aga	H.	boile	ηA	gi :	pida 	urro Lis	arel	 3
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A minimum of 15 units in 500-level courses is required. Satisfactory completion of a written comprehensive examination is required at the conclusion of the program. The examination may be repeated only once. A reading list for the examination and specifications for the project are available in the department

For further information, consult the graduate adviser.

## Linguistics Courses

106 Language and Linguistics (3)

The nature of language, its origin and development; language in culture, the structure of language and its systems of writing and transcription, and its application to other areas of humanistic and scientific knowledge.

108 Linguistics and Minority Dialects (3)

The sounds, meanings and vocabulary of Afro-American, Chicano, and other English dialects and their historical origin.

230 Introduction to Word Origins and Semantics (3)

Recommended as prerequisite to Linguistics 430. An introduction to the role of word and sentence meaning as analyzed by contemporary linguistics theories. Major concepts, such as semantic fields, sense relationships, historical change of meaning and etymology.

251 Animal Language and Communication (3)

Animal linguistic behavior in comparison with human speech and its derivatives, and an exploration of experiments concerned with dolphins, chimps and other species.

254 Nonverbal Communication (3)

The physical actions, gestures and changes in the physiognomy that occur together with language and paralanguage in human communication; substitutions for language and modifications of it in varying cultures. (Same as Speech Comm 254)

301 Sanskrit (4)

An introduction to the devanagari script as well as the phonology, morphology and syntax of the Sanskrit language. A reading knowledge of Sanskrit will be the main goal of the course. (Same as Religious Studies 301)

305 The English Language in America (3)

(Same as English 305)

307 Speech/Language Development (3) (Same as Speech Comm 307)

351 Introduction to Linguistic Phonetics & Phonology (3) The nature and structure of sound systems in language; a thorough investigation of the International Phonetic Alphabet as applied to many different languages including English; analytic

369 Language, Sex Roles, and the Brain (3)

Examines how gender socialization is reflected in the structure and use of language and whether gender differences in language are biologically based or a consequence of sex roles.

450 Acoustic Phonesics (3) (Commerce 402)

375 Introduction to Philosophy of Language (3)

methods and techniques.

406 Descriptive Linguistics (3)

A study of the sounds (phonology), forms and meanings (morphology), and syntax of languages. Examples and problem solving in various languages will be emphasized. (Same as Anthropology 406)

408 Syntax (3)

Prerequisite: One of the following: Linguistics 106, 406, or English 303. The study of sentence structure in human language. Practice in syntactic analysis in a variety of languages.

412 Sociolinguistics (3)

Prerequisite: Linguistics 406 or equivalent. Social dialects in relation to the surrounding communities. Social stratification, acculturation, language maintenance, standardization, language planning and language change.

416 Anthropological Linguistics (3) (Same as Anthro 416)

417 Psycholinguistics (3)
(Same as Psychology 417) (Same as Psychology 417)

430 Historical Linguistics (3) The agreement leading 18

Prerequisite: Linguistics 406, its equivalent, or consent of instructor. The comparative method in diachronic linguistic methodology and theory, graphemics, glottochronology, language families, dialect geography and internal reconstruction. Fulfills the course requirement of the university upper division baccalaureate writing requirement for linguistics majors.

441 Linguistics and Literature (3) (Formerly 354)

Prerequisite: a course in linguistics or English linguistics. Language as the medium of literature; the new stylistics, including theories of word choice, prosody, prose style, structure, statistical analysis, metaphor. Application to various literary forms. (Same as English 441)

442 Changing Words: History, Semantics and

Translation (3) (Formerly 436)

Prerequisites: Linguistics 430, English 490 or consent of instructor. Study of etymology, related problems of lexicography and translation. Recent developments in theory of semantic change as related to cultural shifts. Emphasis on words, collocations, idioms. (Same as English 442)

443A Principles of Teaching English to Speakers of Other Languages (3) (Same as Fl-Ed 443A)

443B Principles of Teaching English to Speakers of Other Languages (3) (Same as Fl-Ed 443B) and spanish more all with a bodger

450 Acoustic Phonetics (3) (Formerly 402) (Same as Speech Comm 450)

492 Linguistic Fieldwork (3)

Prerequisites: Linguistics 351 or 406. Methodology and practice of linguistic analysis and language description as practiced in field. Central is data collection and processing of a non-Indo-European linguistic structure using native informants. May be repeated for credit.

499 Independent Study (1-3)

Supervised projects with consent of department chair. Topic varies with the student. May be repeated for credit.

501 Research Methods and Bibliography (3)

Prerequisites: graduate standing and Linguistics 406, or equivalent. Principal books, periodicals and collections in general linguistics, specific languages and related fields; techniques of preparing research papers and field reports in linguistics. Must be taken prior to Linguistics 597.

505 Phonological Analysis (3)

Prerequisites: Linguistics 351 and 406 or consent of instructor. Phonological systems that occur in languages; emphasis on terminology used to describe changes in the system and processes affecting it; problem solving of selected language data. (Same as Anthropology 505)

507 Grammatical Analysis (3)

Prerequisite: Linguistics 406 or consent of instructor. Word formation in a variety of languages with emphasis on the terminology used to describe morphological representation on various levels; problem solving of selected language data. (Same as Anthro 507)

508 Theories of Syntax (3)

Prerequisite: Linguistics 408 or equivalent. Contemporary theories of grammar, such as transformational-generative, with emphasis on theoretical problems in the analysis of language structure. (Same as Anthropology 508)

530 Graduate Seminar: Historical Linguistics (3)

Prerequisite: Linguistics 430, its equivalent or consent of instructor. The history of language, including principles and techniques for the historical study and classification of individual languages and language families, writing systems, lexicostatistical methods and linguistic geography.

580T Special Topics in Linguistics (3)

Seminar devoted to a topic in contemporary linguistics: linguistic typology; a major language family; areal linguistics; language and the computer. Topic will be circulated in advance of registration. May be repeated for credit. (Same as English 580)

592 Field Methods in Linguistics (3)

Prerequisite: consent of instructor. Methods of analysis and description of language structures. Data elicited from informants will be analyzed and described. (Same as Anthropology 592) May be repeated for credit.

596 Internship in Applied Linguistics (3)

Prerequisite: Linguistics 443 or consent of instructor. The practical application of linguistic theory and methodology in teaching, research, or other professional work in the field. Individual supervision by the faculty and cooperating individuals. Interns meet with the instructor by arrangement. May be repeated for credit.

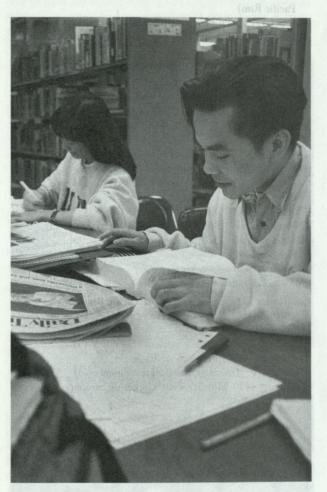
597 Project (3)

Prerequisite: Linguistics 501. Preparation and completion of an approved project, and a second second

599 Independent Graduate Research (1-3)

Prerequisites: graduate standing and consent of department chair. May be repeated for credit.

## Pacific Rim Studies Program



Program Coordinator: William D. Puzo Program Office: McCarthy Hall 103 Coordinator's Office: Humanities 410

Program Offered Minor in Pacific Rim Studies

### Faculty

Ian Bailey (Physical Education), Kwang-Wen Chu (Economics), Joan Greenwood (English), Craig Ihara (Philosophy), Irene Lange (Marketing), Keiji Matsumoto (Foreign Languages), Michael Onorato (History), Jacob Pandian (Anthropology), William D. Puzo (Geography), James Santucci (Linguistics/Religious Studies), Vera Simone (Political Science), Preston Stedman (Music), and Rich Wiseman (Speech Communication)

#### INTRODUCTION

The Pacific Rim includes all or parts of approximately thirty countries adjacent to the Pacific Ocean Basin. The space, peoples, resources, diversity and importance of the Pacific Rim is as great as for any comparable area in the world. The Pacific Rim and Basin occupy nearly half of the world's space. More than sixty percent of the world's people live here. Recently, America's TransAtlantic trade was surpassed by trade with Pacific Rim nations. The world's attention continues to shift from an Atlantic to a Pacific focus.

The Pacific Rim Studies Program is designed for study of those countries along the Pacific Rim which are not already included within the university's Latin American or Russian and East European Studies Programs. The minor makes available a structured selection of courses offered by the program which can complement other majors and the student's educational experience in general.

### MINOR IN PACIFIC RIM STUDIES

The minor consists of 21 units: 6 units chosen from the listed core courses and 15 units of electives chosen in consultation with an advisor as outlined below.

#### Core Courses (6 units)

Anthro 340 Peoples of Asia (3) or Anthro 347 Peoples of the Pacific (3) Geography 346 Pacific World (3) or Geography 340 Asia (3)

### Electives (15 units)

One course each from three of the four following categories, plus 6 units of advisor-approved electives:

### Electives (15 units)

One course each from three of the four following categories, plus 6 units of advisor-approved electives:

Language, Culture, Geography, and Human Behavior

Anthro 340 Peoples of Asia (3)\*

Anthro 347 Peoples of of the Pacific (3)\*

Any Japanese Language Course

Any Chinese Language Course

Geography 330 California Landscapes (3)

Geography 340 Asia (3)\*

Geography 346 Pacific World (3)\*

Physical Ed 151 Aikido (1)

Physical Ed 152 Karate (1)

Speech Comm 320 Intercultural Communication (3)

## History and Politics

History 360 Modern Asia: Nationalism & Revolutionary Change (3)

History 462A History of China (3)

History 462B History of China (3)

History 462C China Since 1949 (3)

History 463A History of Japan (3)

History 463B History of Japan (3)

History 464A History of Southeast Asia 1850-1945 (3)

History 464B History of Contemporary Southeast Asia (3)

Poli Sci 431 Governmental Politics of a Selected Nationstate (3) (when course topic focuses upon

Pacific Rim)

Poli Sci 451T Problems in International Politics (3)

Poli Sci 452T Foreign Policy of Selected Country or Group of Countries (3)

Poli Sci 457 Politics of International Economics (3)

### Arts and Humanities

(including Art, Literature, Philosophy and Religious Studies)

Comp Lit 257 Writing Haiku (1)

Comp Lit 380 Introduction to Asian Literature (3)

Comp Lit 423T Topics in Asian Literature (3)

Music 352 Symphonic Music in Western & Eastern Cultures (3)

Philosophy 350 Oriental Philosophy (3)

Philosophy 352 Philosophy of Asian Martial Arts (3)

Religious Studies 270T Introduction to Oriental Religions (3)

### International Business and Economics

Economics 332 Economics of the Pacific Rim (3)

Economics 333 Economic Development: Analysis & Case Studies (3)

Economics 335 The International Economy (3)

Economics 411 International Trade (3)

Finance 370 International Business Finance (3)

Marketing 445 Multinational Marketing Strategies (3)

<sup>\*</sup>One of these is applicable as an elective if not chosen as a core course.



# Department of Philosophy

Department Chair: Merrill Ring

Department Office: Education Classroom 475

Programs Offered Bachelor of Arts in Philosophy
Minor in Philosophy

### Faculty

David Depew, Albert Flores, James R. Hofmann, Craig Ihara, Merrill Ring, Gloria Rock, J. Michael Russell, Shari Starrett, Frank Verges, Robert Wachbrit

### Advisers (1) Advisers

For advisement about the major or the minor in philosophy, please contact the chair of the department.

#### INTRODUCTION

Philosophy began when people first questioned the accounts poets and priests had handed down about the structure of the world and the meaning of human life. Since then philosophers have helped create and explore virtually every aspect of our cultural life, including science, religion, art and politics. To study philosophy, therefore, is to engage in a classic form of liberal education in which powers of reasoning and conceptual analysis are explicitly developed. The study of philosophy includes (1) the practice of analytic and problem-solving skills; (2) the investigation of conceptual problems encountered in the course of reflecting about experience; (3) the assessment of assumptions underlying other sciences and arts; and (4) the exploration of intellectual and cultural history from a broad perspective. Philosophy is not a "high unit" major. It is possible for many students to obtain the benefits of a philosophically based liberal education while also majoring in another, more directly career oriented field. The Philosophy Department also encourages minors, which can be tailored to the student's individual interests or other fields of study. Majoring or minoring in philosophy is an excellent way of preparing for law school and other graduate careers that involve facility in reasoning, analysis and information processing.

### Awards in Philosophy

The Paul C. Havner Memorial Award, to the outstanding graduating senior in philosophy; the William H. Alamshah Memorial Prize, for the best undergraduate philosophy essay submitted.

### BACHELOR OF ARTS IN PHILOSOPHY

A minimum of 42 units in philosophy are required.

- 1. Philosophy 315 Philosophical Argument and Writing (3)
- Required courses in the history of philosophy before 1900: (12 units)

Philosophy 290 History of Philosophy: Greek Philosophy (3)

Philosophy 291 History of Philosophy: Medieval Philosophy (3)

Philosophy 300 History of Philosophy: Rationalism and Empiricism (3)

Philosophy 301 History of Philosophy: Kant and the 19th Century (3)

- 3. History of 20th-century philosophy requirement: (3 units). One of the following courses: Philosophy 323, 378, 380.
- 4. Other courses requirements (9 units)

Ethics: Philosophy 310 or 410

Metaphysics, Epistemology: Philosophy 420 or 430 or 440

Logic: Philosophy 210 or 368

- Seminar requirement: Three units (one course) from Philosophy 447, 455, 460, 470, 480 or 490.
- 6. Electives: 12 units of philosophy courses, no more than six lower-division, which have not been used to fulfill other reguligements.

### MINOR IN PHILOSOPHY

Students in other disciplines often find that a background in philosophy enriches their university experience and enhances work done in other fields in preparation for specific careers. The minor in philosophy requires 21 units in philosophy, at least 12 of which must be upper division. Courses taken in fulfillment of general education requirements may be counted toward the minor. The Department of Philosophy offers two ways of pursuing the minor:

- A: Among the 21 units, at least six units from among the following courses: Philosophy 115, 116, 290, 291, 300, 301, 378; and either a senior seminar or three units of Philosophy 499.
- B: Among the 21 units, at least 15 units to be chosen from among philosophy courses correlative to the student's major or intended postbaccalaureate field, as approved by the philosophy adviser.

### RECOMMENDED COURSE WORK FOR PHILOSOPHY MAIORS

A program in philosophy profits greatly from the study of psychology, the natural and social sciences, and literature. Students are advised to supplement their studies in philosophy with course work offered in these fields and in fields closely related to their philosophical interests.

Students who are planning to attend graduate school in philosophy are urged to acquire proficiency in a foreign language, and to include in their programs, in addition to the required courses, as many as possible of the following:

Philosophy 303	Introduction to the Philosophy of
Science (3)	
Philosophy 368	First Course in Symbolic Logic (3)
Philosophy 369	Second Course in Symbolic Logic (3)
Philosophy 375	Introduction to the Philosophy of
Language (3)	
Philosophy 378	Contemporary Philosophy (3)
Philosophy 380	Analytic Philosophy (3)
Philosophy 384	Philosophy of the Physical Sciences (3)
Philosophy 410	Ethical Theory (3)
Philosophy 420	Metaphysics (3)
Philosophy 430	Epistemology (3)
Philosophy 440	Philosophy of Mind (3)
Philosophy 455	Seminar in Values (3)

#### Transfer Credit

Work done in philosophy at other institutions may be counted toward the major, subject to the rules of the university and the following departmental rules: (1) only senior seminars can fulfill the seminar requirement; (2) only upper-division work can fulfill upper-division requirements; (3) in no case can more than six units of lower-division work taken at another institution count toward the major requirement of 42 units. Six units of philosophy taken at another university may be counted toward the minor.

### Philosophy Courses

For more detailed course descriptions, consult the course guide which is available each semester at registration time in the Philosophy Department office.

### 100 Introduction to Philosophy (3)

The nature, methods and some of the main problems of philosophy. Primarily for freshmen and sophomores. Not a prerequisite for advanced courses. (CAN PHIL 2)

### 110 The World's Great Religions (3)

An introduction to at least five religious world views from an historical and comparative perspective, with descriptive analysis of their belief sytem, moral code, and symbolic rituals: Judaism, Christianity, Islam, Hinduism, and Buddhism. (Same as Religious Studies 110)

### 115 Western Philosophy to 1600 (3)

Major developments in the philosophical heritage of Western civilization to the 16th century. Readings typically include selections from such philosophers as: Plato, Aristotle, Epictetus, Augustine, Anselm, Aquinas, Ockham, Francis Bacon.

### 116 Western Philosophy since 1600 (3)

Major developments in Western civilization's philosophical heritage from the 16th/17th centuries to the present. Readings typically include selections from such philosophers as: Montaigne, Descartes, Hobbes, Locke, Hume, Kant, Rousseau, Mill, Marx, Russell, Sartre.

### 150A Western Civilization to the 16th Century: A Comparative Approach (3)

(Same as History 150A)

### 200 Argument and Reasoning (3)

Development of non-mathematical critical reasoning skills, including recognition of arguments, argument evaluation and construction of arguments.

210 Logic (3) The logical structure of language and correct reasoning: deduction, induction, scientific reasoning, informal fallacies. Instructional fee. (CAN PHIL 6)

### 290 History of Philosophy: Greek Philosophy (3)

The origins of Western philosophy, and its development through Socrates, Plato and Aristotle.

### 291 History of Philosophy: Medieval Philosophy (3)

Scholastic philosophy and its precursors in ancient thought.

### 300 History of Philosophy: Rationalism and Empiricism (3)

The rationalism of Descartes, Spinoza and Leibniz, and the empiricism of Locke, Berkeley and Hume,

### 301 History of Philosophy: Kant and the 19th Century (3)

Prerequisite: Philosophy 300 (may be taken concurrently) or consent of instructor. Brief review of rationalism and empiricism as a background to Kant. A study of the revolutionary aspects of Kant's critical philosophy. An exploration of subsequent trends in nineteenth century philosophy, emphasizing such figures as Hegel, Schopenhauer, Marx, Mill, Kierkegaard and Nietzsche.

### 302 Introduction to Women's Studies (3)

Prerequisite: either Philosophy 100, Biology 101, Psychology 100, Sociology 100, or consent of instructor. Interdisciplinary introduction to feminist theories and women's studies. Examination of historical and contemporary women's issues and research in relevant disciplines.

### 303 Introduction to the Philosophy of Science (3)

Prerequisite: general education physical or biological science requirement. Logical and methodological features of scientific inquiry; nature of theories and interpretation of theoretical terms; scientific progress; impact of science on society and of society on

### 310 Ethics (3)

Problems of human conduct and moral evaluation: standards for moral assessment of conduct and persons; morality and its relation to mores, social demands and personal commitments.

### 311 Aesthetics: Philosophy of Art and Beauty (3)

The conditions and aims of art and of aesthetic experience.

### 312 Business and Professional Ethics (3)

Prerequisite: upper-division standing. Explores the nature and limits of the moral rights and responsibilities of business and the professions (including law, medicine, science, engineering, journalism, management and teaching).

### 313 Environmental Ethics (3)

Prerequisite: Completion of GE III.B.2 or III.C.1. Examines the conceptual and moral foundations of environmental ethics focusing on ecosystem and wildlife conservation policies, animal rights, a land ethic, competing policy analyses, and obligations to future generations.

### 314 Medical Ethics (3)

Prerequisite: upper-division standing. An examination of ethical issues raised by recent technical developments in medicine, and of the moral rights and responsibilities of patients and health-care professionals.

### 315 Philosophical Argument and Writing (3)

Prerequisite: three units of philosophy. Philosophical concepts, distinctions and methods are used to teach philosophical and argumentative writing which is clear, critical, expressive and precise. This course is designed to satisfy the classroom portion of the upper-division writing requirement for philosophy majors.

#### 323 Existentialism (3)

Introduction to existentialist perspectives on freedom, meaning, responsibility, authenticity and self-deception. The course typically includes discussion of Kierkegaard, Nietzsche, Heidegger and Sartre.

324 Existential Group (3)

Prerequisite: consent of the instructor. An investigation of how themes in the writings of existentialist philosophers pertain to the life styles, actions, and feelings of the class participants.

341 Assumptions of Psychotherapy (3)

Prerequisite: completion of Implications and Explorations in Social Sciences section of the general education program or consent of instructor. Philosophical concepts and assumptions pertinent to the theory of psychotherapy, such as the Cartesian, the mechanistic and the deterministic assumptions of Freud.

343 Philosophy of Feminism (3)

Prerequisite: three units of philosophy or three units of women's studies. A critical examination of philosophical issues connected with "second-wave" U.S. feminism. Alternative feminist theories, goals and reconstructions of traditional areas of philosophy.

345 Political Philosophy (3)

Philosophical problems concerning the nature, purposes, justification and limits of government and states; political authority, rights, and duties. (Not the same as Political Science 340)

347T Selected Problems in Philosophy (1-3)

Examination and clarification of some philosophical topic or group of related topics not adequately covered in other listed philosophy courses. May be repeated with different content for additional credit.

348 Philosophy of Religion (3)

The role of philosophy in shaping theological doctrine, in critically evaluating religious experience, in arguing for or against the existence of God, and in considering the problem of evil. (Same as Religious Studies 348)

350 Oriental Philosophy (3)

Prerequisite: completion of Introduction to the Humanities section of the general education program. Asian philosophies such as Taoism, Confucianism and Buddhism (especially Zen): world views, conceptions of human nature and the good life for man. Applications to martial and non-martial arts. Comparisons with Western philosophies, religions and values.

352 Philosophy of Asian Martial Arts (3)

Prerequisite: Three units of philosophy or appropriate prior instruction in the martial arts. A philosophical examination of Asian martial arts and how they relate to Taoism, Buddhism, Confucianism, Shinto and Zen. Samurai ideals will be compared to those of the warrior traditions of the Middle Ages and Homeric Greece.

355 Philosophy of Law (3)

Prerequisite: three units of philosophy. A philosophical examination of the concept of law and the principles and institutions that administer the law. 365 Social Philosophy (3)

Prerequisite: three units of philosophy. Theories about the nature of various social, political and legal institutions, and arguments about what these institutions ought to be.

368 First Course in Symbolic Logic (3)

Prerequisite: entry Level Mathematics Examination; upper-division standing. The recognition and construction of correct deductions in the sentential logic and the first-order predicate calculus. Instructional fee. (Same as Math 368)

369 Second Course in Symbolic Logic (3)

Prerequisite: Philosophy 368 or Mathematics 368. Continuation of Philosophy 368. Recognition and construction of correct deductions in the full first-order predicate calculus with identity and the calculus of descriptions. Alternative systems. Elementary results in metamathematics. (Same as Math 369)

375 Introduction to the Philosophy of Language (3)

Prerequisite: six units of philosophy or six units of linguisites or three units of each. A study of philosophical issues about language including topics such as meaning, reference, predication, and truth. (Same as Linguistics 375)

378 Contemporary Philosophy (3)

Prerequisite: six units of philosophy or consent of instructor. Main trends in 20th-century philosophy such as pragmatism, logical empiricism, ordinary language philosophy, phenomenology, existentialism, hermeneutics; recent developments.

380 Analytic Philosophy (3)

Prerequisite: six units in philosophy or consent of instructor. Investigation of the rise and development of the analytic movement in 20th-century philosophy. Works of such philosophers as Moore, Russell, Wittgenstein, Carnap, Quine, Ryle, Austin and Strawson will be studied.

382 Marx and Marxism (3)

Prerequisite: upper-division standing. Marx and his followers in philosophical perspective. Theories of human nature, society and intellectual activity; conceptual tools for the analysis of social phenomena; sources; and followers, both critical and dogmatic.

384 Philosophy of the Physical Sciences (3)

Prerequisite: completion of disciplinary core section of general education program or consent of instructor. Space, time and relativity; quantum mechanics, causality and real existence; laws, theories, models; topics in history of science. (Same as Physics 384)

385 Philosophy of the Social Sciences (3)

Prerequisite: completion of Introduction to the Social Sciences in the disciplinary core section of the general education program or consent of instructor. Methodological problems about the social sciences: objectivity and value; emergence; explanation; functionalism and reductionism.

### 386 Philosophy of Biology (3)

Prerequisite: completion of general education requirements in Biological Science. Conceptual foundations of biological science and especially of evolutionary theory. Applicability of such concepts as natural law, theory reduction, emergence and teleology to the investigation of living things from the molecular to the ecological level.

### 399 Directed Study (1-3)

Prerequisite: approval of department. Supervised individual study as an elective. May be repeated for credit with different content. No more than three units may be taken with any one adviser in any one semester.

### 400 Ethical & Professional Issues in Human Services (3) (Same as Human Services 400)

### 401 Knowledge of the Arts and Sciences (3) (Formerly 304)

Prerequisites: Liberal Studies 304 and either Liberal Studies 303 or 305. A philosophical analysis and comparison of how the natural sciences, the social sciences, and the arts and humanities apply epistemological or aesthetic criteria to assess scientific and artistic activities. Discussion of the evolution of these criteria in their social and ideological context.

### 410 Ethical Theory (3)

Prerequisite: prior course in ethics or instructor's consent. An examination of major ethical theories as advanced by such authors as Aristotle, Kant, Mill, Rawls, and MacIntyre.

### 420 Metaphysics (3)

Prerequisite: six units in philosophy or consent of instructor. Metaphysics and metaphysical issues such as reality, universals, space, time, substance, identity and difference, causality, permanence and change, freedom and determinism, minds and bodies.

### 425 Introduction to Phenomenology (3)

Prerequisite: six units in philosophy or consent of instructor. The historical background and basic viewpoints which have provided a framework for philosophical research and study in the writings of Husserl, Heidegger, Sartre and Merleau-Ponty.

### 430 Epistemology (3)

Prerequisite: six units in philosophy or consent of instructor. The nature of knowledge, belief, certainty, truth, perception, and the a priori; examinations of skepticism, traditional responses to skepticism, and the foundations of knowledge.

### 440 Philosophy of Mind (3)

Prerequisite: six units in philosophy or consent of instructor. The concept of mind, and such related issues as the mind-body relation, behavior, consciousness, voluntary action, weakness of will, and our knowledge of other minds.

### 447T Seminar in Selected Problems (3)

Prerequisite: six units in philosophy or consent of instructor. Intensive study of one philosophical concern, such as an individual philosopher or topic. May be repeated with different content for additional credit.

### 455 Seminar in Values (3)

Prerequisite: Appropriate course from among Philosophy 310, 311, 410, or consent of instructor. Valuation or some important form of value: ethical, aesthetic, political. May be repeated with different content for additional credit.

### 460 Seminar in Logic and Language (3)

Prerequisite: appropriate course from among Philosophy 368, 369, 375. Advanced topics in logic or philosophy of language; or foundations of logic and mathematics. May be repeated with different content for additional credit.

### 470T Seminar in Metaphysics and Epistemology (3)

Prerequisite: Philosophy 420 or 430 or 440, or consent of instructor. Topics in metaphysics and epistemology such as reality, substance, mind, action, cause, knowledge, truth. May be repeated with different content for additional credit.

### 480T Seminar in the History of Philosophy (3)

Prerequisite: an appropriate course from among Philosophy 290, 291, 300, 301, or consent of instructor. Some important work, figure, school or problem in the history of philosophy before 1900. May be repeated with different content for additional credit.

### 490 Seminar in Contemporary Philosophy (3)

Prerequisite: appropriate course work or consent of instructor. Issues raised by such 20th-century philosophers as Russell, Moore, Wittgenstein, Austin, Quine, Husserl, Heidegger, Merleau-Ponty or Foucault. May be repeated with different content for additional credit.

### 499 Independent Study (1-3)

Prerequisite: approval of department. To develop competency in research. May be repeated for credit. No more than three units may be taken with any one adviser in any one semester.

## Department of Political Science

Department Chair: Sandra Sutphen

Department Office: Education Classroom 424

### Programs Offered

Bachelor of Arts in Political Science

Concentration in Public Administration

Minor in International Politics

Minor in Political Science

Minor in Public Administration

Master of Arts in Political Science

Master of Public Administration

### Faculty

Virginia Bott, Keith Boyum, Michael Brown, Vincent Buck, Bert Buzan, Julian Foster, Phillip Gianos, Harvey Grody, Karl Kahrs, Marlyn Madison, Alana Northrop, Paul Peretz, Alan Saltzstein, Choudhory Shamin, Vera Simone, J. Owens Smith, Raphael Sonenshein, Barbara Stone, Sandra Sutphen, Yuan Ting, Bruce Wright, Jon Yinger.

### Advisers

The department emphasizes proper advisement, and all majors are strongly urged to talk with either the undergraduate, the prelaw or the public administration adviser as soon as possible after entering the program. The adviser helps with study plans, and gives information about subsequent career possibilities, including law and other graduate schools, postbaccalaureate fellowships and scholarships, and job possibilities in local government.

#### INTRODUCTION

Political science is the study of people's behavior as it relates to power and public organizations. The discipline is normally divided into six subfields:

Political philosophy, which deals with normative questions about how power should be used and distributed, rights and obligations, the nature of justice and the ideal state.

American politics, which is concerned with campaigns and elections, parties, elected executives, legislative processes, and issues of public policy.

Public administration, the role played by public employees in policy making, planning, personnel management, taxation and finance, and in responding to the needs and problems of communities and the nation.



Public law, which involves the judicial process, civil rights and liberties, and the significance of such terms as "equal opportunity" and "due process" in the United States.

Comparative government, which raises the same questions of politics, administration and law about other countries, and moves toward conclusions based on comparisons between them.

International politics, which is concerned with relations between the states and other international actors such as multinational corporations and the United Nations and with the underlying realities of power, based on resources, wealth, military preparedness and national security.

A major in political science prepares students for law school, government employment on the local, state and national levels, foreign service, teaching, business, journalism, or leadership in civic and political activities.

The department offers a concentration in public administration for those who seek careers in public service. The concentration describes the environment in which the profession exists and the concepts and goals which underlie such functions as budgeting, personnel work, policy analysis and management. Experience is gained through the administrative internship.

For prelaw students, the department provides a series of lawrelated courses numbered in the 370 and 470 series (see course descriptions). There is a prelaw adviser and an active Prelaw Society which enables students to make close and direct contact with the work of attorneys, judges, etc. The department is closely tied to the College Legal Clinic, which provides free legal advice for students and others who cannot afford the usual costs.

#### Internships

The department offers a variety of internships. Each one involves students in working in an agency or political organization, and in meeting in an on-campus seminar to discuss and analyze their experiences. Internship courses are numbered 298, 491, 492, 497 and 498 (see course descriptions).

### BACHELOR OF ARTS IN POLITICAL SCIENCE

### Basic Requirements

The major consists of 36 units of political science, of which at least 30 units must be in the upper division, plus 12 upperdivision units in related disciplines, such as American studies, anthropology, criminal justice, economics, geography, history, philosophy, psychology, sociology and statistics. Work in related fields must be approved in writing by one of the department's undergraduate advisers.

### Breadth Requirements

Majors, with the exception of those choosing the public administration concentration, are required to take Political Science 340 Political Philosophy and an introductory course (as listed below) in four of the five remaining subfields of political science.

Poli Sci 310 American Political Behavior (3)

or 315 American Political Process (3)

Poli Sci 320 Politics, Policy and Administration (3)

Poli Sci 330 Comparative Political Analysis (3)

Poli Sci 350 World Politics (3)

or Poli Sci 352 American Foreign Policy (3)

Poli Sci 375 Public Law (3)

Those choosing the public administration concentration described below take Political Science 320 and one other course listed above.

### Research Methods Requirement

All majors must acquire a knowledge of research methods and approaches either by taking Poli Sci 407 Quantitative Methods in Poli Sci or by taking one of the research proseminars: Poli Sci 321, 351 or 376. Those concentrating in public administration must take either 407 or 321.

#### CONCENTRATION IN PUBLIC ADMINISTRATION

In addition to fulfilling the breadth, research methods and related disciplines required in the ways described above; those who wish to concentrate in public administration must take:

- 1. Nine units from among the following courses on administrative and management processes: Poli Sci 421, 422, 426, 475, 478 and 497.
- 2. Six units from among the following courses on policy and administrative analysis: Poli Sci 420, 427, 456 and 482.
- 3. Nine units from courses in the general area of the American political process, as approved by the adviser.

A total of 36 units in public administration and political science is required. Students are urged to consult an advisor for changes in these course lists.

### Political Science Honors Program

The department honors program provides an enriched learning experience for a selected group of students and encourages closer interaction between these students and faculty members in specialized fields of interest. Eligibility requires senior standing, a major in political science, 3.0 overall grade point average and 3.25 grade point average in all political science course work, plus recommendation for admission to the program from a faculty member in the Department.

### MINOR IN INTERNATIONAL POLITICS

The minor consists of 21 units, of which 15 must be in political science. At least six units must be taken from: Poli Sci 350, 352 or 457. The remaining units must be taken from: Poli Sci 350, 352 or 457, if not already taken to fulfill the six-unit requirement specified above, Communications 426, Economics 330, Economics 335, History 485, and Poli Sci 351, 430, 431, 451, 452,

456, 461, 491. Students who wish to specialize in a specific geographical area are encouraged to investigate the possibility of taking related units in anthropology, economics, foreign languages, geography, history and literature, etc.

### MINOR IN POLITICAL SCIENCE

The minor is composed of 18 units in upper-division political science courses plus Poli Sci 100.

### MINOR IN PUBLIC ADMINISTRATION

The minor is composed of 18 units. Students must take Poli Sci 320, 12 units selected from the courses on administrative and management processes (defined under the public administration concentration, above) and one additional upper-division political science course.

### MASTER OF ARTS IN POLITICAL SCIENCE

The degree is designed both to enlarge and deepen the competence of political science students. It is especially planned for the professional improvement and advancement of high school and community college teachers, government employees, and military personnel. It also prepares students for entering a doctoral program in political science or for law school. The M.A. program provides training and preparation for journalists, special librarians, and research staffers and for all people active in civic affairs and political life.

### Admission to Graduate Standing: Conditionally Classified

Conditionally Classified
University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted.

In addition to the university requirements, acceptance into the M.A. in political science program requires a grade-point average of 3.0 in the major field. If the major is not in one of the social sciences, the GPA requirement of 3.0 also applies to upper-division social science courses taken. If a student's GPA does not meet these criteria, the student may appeal to the department's graduate committee for a waiver.

### Graduate Standing: Classified

A student admitted to conditionally classified status may apply for classified standing which requires development of an approved study plan prior to completion of nine units. Refer to the "Graduate Regulations" section of this catalog for further information on classified standing and general study plan requirements.

### Study Plan Source of Tanorrangary of Royale

Each candidate for a degree should, in consultation with the graduate adviser, arrange for the appointment of a graduate committee, composed of three faculty members, one of whom will serve as chair. This committee will approve the study plan, conduct the examination(s) and supervise the thesis if the student chooses that option.

As a requirement for admission to classified standing, the student, in cooperation with the graduate program adviser, must develop a study plan of 30 units of course work:

1. 15 units of required seminar work in political science. Students are required to take a minimum of one seminar each semester until completion of the entire sequence.

Scope and Theory of Political Science

Poli Sci 540 Seminar Readings in Political Philosophy (3) Poli Sci 541 Seminar in Contemporary Political

Theory (3)

American Politics/Public Affairs

Poli Sci 511 Seminar in American Politics (3)
Poli Sci 519 State and Local Government (3)
or Poli Sci 509 Administrative Organization and
Process (3)

or Poli Sci 525 Seminar in Metropolitan Area Government (3)

or Poli Sci 528 Seminar in Public Administration and Policy (3)

Cross-National Politics

Poli Sci 530 Seminar in Cross-National Politics (3)

2. 15 units of elective course work in political science (adviser-approved 400 and/or 500-level classes). These will normally be classes in a student's chosen area of specialization. They may include, where appropriate, 599 Independent Graduate Research (6 units maximum) and either 597 Project (3 units) or 598 Thesis (3-6 units).

No more than nine units taken prior to classified standing may be applied to a student's study plan. No more than nine units taken at another institution may be transferred, and these must be approved by the adviser, committee and dean of graduate studies.

### Research Skills A an abus semilapsals bounts at exiate motorvib

Each candidate must demonstrate one of the following:

- Reading knowledge of a foreign language. Students must complete this requirement by passing an examination.
- Proficiency in quantitative research skills, including data analysis and research design as demonstrated by successful completion of Poli Sci 407 Quantitative Methods in Political Science, or its equivalent.

### Comprehensive Examinations

All students will successfully complete written and oral examinations in Scope and Theory of Political Science, American Politics/Public Affairs and Cross-National Politics. All three sections must be successfully completed or the entire examination must be retaken. The examination has a written and an oral component. A student who does not pass the written portion is ineligible to take the oral test. The examinations may be retaken only once after an initial failure.

For advisement and further information, consult the M.A. in Political Science adviser.

### MASTER OF PUBLIC ADMINISTRATION

This professional degree is designed to disseminate the knowledge and skills needed for efficient and effective government. The program acquaints the student with the theoretical and practical skills needed to improve the practice of governmental management. It also prepares one to cope with the ethical and moral dimensions of the contemporary policy maker. Career guidance, working experience and placement are important components of the program. It is designed to:

- 1. Prepare students who wish to enter the field of public adminis-
- 2. Increase the professional competence of those already embarked in public administration careers;
- 3. Provide academic study for persons who wish to prepare themselves for second careers in public service;
- 4. Furnish academic study for those wishing to pursue doctoral work; and between the control of the statement of the work;
- 5. Provide specialized training in areas such as financial administration, personnel administration, administrative research, planning and criminal justice.

The program is designed to aid the student in acquiring several skills. These include:

- 1. Written and oral communication for public administration;
- 2. Public administration research and analysis techniques;
- 3. Knowledge of organization processes and behavior;
- 4. An understanding of federal, state and local governmental and administrative systems and processes; and

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5. Knowledge of administrative techniques and practices such as personnel testing, program budgeting and management by objectives.

Students may also develop knowledge of various specialized areas of employment such as criminal justice, human services administration, health administration and gerontology.

### Admission to Graduate Standing: Conditionally Classified

One may become conditionally classified in the Master of Public Administration if the university requirements for admission are met. These requirements are: a baccalaureate degree from an accredited institution and a grade point average of at least 2.5 in the last 60 semester units attempted (see "Graduate Regulations" section of this catalog for complete statement and procedures).

### Graduate Standing: Classified

A student who meets the above requirements may become a classified student if the following conditions are met:

- 1. Completion of a minimum of 12 semester units of undergraduate course work in the social sciences, six semester units of which must have been upper-division level. At least one of the courses must have been in economics. These social science courses, to satisfy this requirement, must have included such curriculum components as: social, political and legal environment; cultural, ethical and social values; levels and institutions of government; human behavior in organizations; concepts and practices of administration; and political processes of government. Upon recommendation of the public administration faculty, suitable practical experience may be substituted for a maximum of six units of the social science requirement. or notable of quemons notaristambe
- 2. Completion of a one-semester course in basic statistics;
- 3. Satisfying at least one of the following conditions:
- A. A grade-point average of at least 3.25 in the undergraduate major and 2.5 in the last 60 units;
- B. Between 2.75 and 3.24 in the undergraduate major, 2.5 in the last 60 units, and at least 1000 combined score on the General Test of the Graduate Record Exam;
  - C. Between 2.75 and 3.24 in the undergraduate major, 2.5 in the last 60 units, and quality professional experience as evaluated by the MPA coordinator based on job description, resume, two letters of reference and four years of professional administrative service;
  - D. A grade-point average of at least 2.5 in the last 60 semester units and completion of the first twelve units of adviser-approved course work in this program with a gradepoint average of 3.25.
- 4. Approval of a study plan through consultation with the M.P.A. coordinator.

Study Plan The degree study plan must include a minimum of 39 semester units of adviser-approved course work which meets the following requirements:

1. Eighteen units of required core course work in public administration as follows:

	Units
Poli Sci 521	Seminar in Public Administration
Theory	,
Poli Sci 523	Administrative Research and
Analysis .	
	Seminar in Administrative Behavior 3
Poli Sci 571	Seminar in Public Finance
Poli Sci 572	Seminar in Public Sector Resource Management
Human	Resource Management
esting to along	I. Completion of a minimum of 17 semester
And one of t	he following:
Poli Sci 519	State and Local Government
Poli Sci 525	Seminar in Metropolitan Area
Governmen	nt
Poli Sci 528	Seminar in Public Administration
and Policy	AAAA . AAAA . AAAA AAAA AAAA AAAA AAAA
	18
Total !	secretarian re-countil rest releases

- 2. Students who do not have adequate public service experience will be required to take three units of credit in the public administration internship in addition to the minimum 39 units required for the degree.
- 3. Students who have not completed a foundations of public administration course within the last three years will be required to take Poli Sci 509 Administrative Organization and Processes.
- 4. Student electives should be planned in accordance with career objectives and must include at least two courses in one of these areas: public finance, human resources, or urban management. The Ceneral Test of the Oradome Record
- 5. Candidates for the M.P.A. degree must successfully pass a written comprehensive examination in public administration, or a candidate may, with the approval of the M.P.A. adviser, choose either the project (Poli Sci 597) or the thesis (Poli Sci 598) in lieu of the comprehensive examination. Both the project and the thesis earn three units of course work each and include a final oral defense.
- 6. Candidates who enroll in 400-level courses will be required to do additional work beyond that required of undergraduates.
- 7. A minimum of half the units must be completed at the 500level. they organize a secondary of A.S.M. as

- 8. No more than nine units from other institutions may be accepted for transfer credit.
- 9. No more than nine units of postgraduate course work taken prior to classified standing may be applied to the master's degree program.

### Political Science Courses

Poli Sci 100 or its equivalent is the prerequisite for all upperdivision political science courses; 300-level courses beginning with 310 may require concurrent enrollment in a research proseminar. Prerequisites may be waived only with consent of The program acquaints the student with the the strong aff

### 100 American Government (3)

People, their politics, and power; contemporary issues, changing political styles and processes, institution and underlying values of the American political system. Satisfies state requirements in U.S. Constitution and California state and local government. (CAN GOVT 2)

### 200 Introduction to the Study of Politics (3)

An introduction to the study of politics in general, not simply American politics. Explores the many faces of politics all over the world, examining its relationship to morality, culture, economics, justice and international affairs both theoretically and practically.

### 298 Political Externship (3)

Politics for the nonmajor or beginning political science student. Work in campaigns or in the offices of elected public officials; supervision by faculty and cooperating agency; seminars and individual conferences. May be repeated once.

### 300 Contemporary Issues in California Government and Politics (3)

Prerequisite: Poli Sci 100. The political process in state and local institutions; crisis in the cities, flight to the suburbs and race relations. Comparisons will be made with other states and their subdivisions. Satisfies state requirement in California state and local government.

### 309 Introduction to Metropolitan Politics (3)

Prerequisite: Poli Sci 100. The inner city and suburbia. Political processes: power in the city, the urban-suburban relationship, political fragmentation and the national government in urban areas.

### 310 American Political Behavior (3)

The analysis of issues and divisions in American politics. Focus on race, class, ideology and party.

### 312 Contemporary Issues in Conflict (3)

Prerequisite: Poli Sci 100. Through opinionated debate and discussion between two professors with opposing viewpoints, we will explore current conflicts in federal and state elections, as well as other public issues. Open discussion will be encouraged.

### 315 American Policy-Making Process (3)

Prerequisite: Poli Sci 100. Federal domestic policy making. The structure, functions and relationships among American national institutions, including executive, legislative and judicial branches, media, political parties and pressure groups.

### 317 Black Politics (3)

(Same as Afro 317)

### 320 Politics, Policy and Administration (3)

Public administration and the roles played by administrators in the formulation and execution of public policy.

### 321 Research Proseminar in Politics, Policy and Administration (3)

Prerequisite: Poli Sci 320 (may be taken concurrently). Research concepts and techniques applied to public administration and policy analysis. Instructional fee.

### 330 Comparative Political Analysis (3)

Compares patterns of political behavior and interaction in various political systems.

### 331 Comparative Third World Politics Through Literature (3) and an analysis of the Holl stratuments

Prerequisites: Poli Sci 100. Examines comparative political life and circumstances of developing countries as depicted in their literature. In this literature we see the political problems, cultural underpinnings and governmental structures as they affect Third World peoples in their struggle to survive and grow.

### 340 Political Philosophy (3)

The major thinkers in the Western tradition of political philosophy from Plato to the present; the principal concepts and theories. (Not the same as Philosphy 345)

### 344 AIDS: Politics, Policy and Management (3)

Prerequisite: Poli Sci 100. Origins, causes, and epidemiology of AIDS from the perspective of policies, politics, and management practices in determining direction and effectiveness in control (education and intervention), health care delivery, and development of drug therapies and vaccines.

### 350 World Politics (3) (E) sites of ada, bus establed 844

Political relationships among governments and other participants within the global system: internal and external factors influencing foreign policies of the great powers, their allies and minor powers; role of non-state actors such as the United Nations, multinational corporations and liberation movements.

### 351 Research Proseminar in International Politics (3)

Prerequisite: Poli Sci 350 or Poli Sci 352 (may be taken concurrently). Research design, information sources and techniques applied in the scientific study of world politics.

### 352 American Foreign Policy (3)

United States' foreign policy since World War II. Institutions and bureaucracies of foreign policy decision-making, military and national security policy, domestic sources of foreign policy.

### 361 Model United Nations (3)

Prerequisite: Prior MUN experience or consent of instructor. A practical decision making course where students participate in the national MUN conference in New York and others in California. The focus is on current politics in the UN and delegate preparation with emphasis on the art of lobbying, negotiation, bargaining and diplomacy. The reservoir of the servoir state of the serv

## 375 Public Law (3)

Nature and function of public law particularly, within the Anglo-American political tradition. Emphasis upon impact of legal and political institutions upon each other.

### 376 Research Proseminar in Public Law (3)

Prerequisite: Poli Sci 375 (may be taken concurrently) or consent of instructor. Research concepts, techniques and legal tools applied to an individual research project in public law. Useful prelaw course.

### 401 The Politics of Education Policy (3)

Prerequisite: Poli Sci 100 and consent of instructor. The nature of education policy especially in the California political experience and environment. The impact of historical and current socioeconomic conditions. Institutions, bureaucracies of education policy making and implementation. Case studies.

### 402 Urban Minority Politics (3)

Prerequisite: Poli Sci 100. Explores the search for equality through political action by racial, ethnic and sexual minorities in American cities. Examines the political styles and strategies of Blacks, Latinos, Asian-Americans, women and white liberals. Evaluates potential of biracial and rainbow coalitions for creating social change. (Same as Afro-Ethnic Studies 402 and Chicano Studies 402)

### 403 Sacramento Policy Seminar (3)

Prerequisite: Poli Sci 100; upper division or graduate standing; and consent of instructor. The nature of policy making in California's state capital. Persistent policy themes and constraints: current issues in education policy. Required 3-day trip to Sacramento for seminars and policy briefings. Class times prior to Sacramento visit may vary.

### 405 Campaigns and Elections (3)

Prerequisites: Poli Sci 100 and consent of instructor. An exploration of modern political campaigns in America focusing on new types of candidates and electoral organizations; money, media and consultants; and methods of predicting and interpreting election results.

### 407 Quantitative Methods in Political Science (3)

Quantitative research methods in political science. Introduction to research design and statistical measures employed in analyzing social science research data.

### 410 Political Parties (3)

The structure and methods by which the political parties operate in the American political system with some comparisons to their structure and operation in other democratic societies.

### 411 Art of Administration (3)

Prerequisite: consent of instructor. Public administration as "art" rather than "science." Administrative novels and other fictional literature, and other audio-visual media. (f.) was silded 250

### 412 The Art of Politics (3)

Prerequisite: Poli Sci 100. Politics as practiced and understood by practitioners of the art. A seminar which features guest lecturers and focuses on electoral politics.

### 414 The Legislative Process (3)

Prerequisite: Poli Sci 100. The legislative process in Congress and state legislatures. Legislative behavior, policy, representation, and reform. Congressional oversight and the the legislative roles of the President, bureaucracy and interest groups.

### 416 The American Presidency (3) and to solute and the

Presidential power, the resources on which that power is based, and the limitations on the use of that power. The relations between the President and Congress, the bureaucracy, the press and the public. Service and anomalies amonalies amonalies

#### 417 Politics Through Film (3)

Prerequisite: Poli Sci 100. American politics from the Twenties to the present as seen through eyes of film-makers. Besides viewing films, students will read material relevant to films and write several papers linking film themes to the literature of American politics.

### 421 Government and the Economy (3)

Prerequisite: Poli Sci 320 or any economics course. Reviews regulation and deregulation of business. Explores industrial policy. Examines government taxes and expenditures. Emphasis on national government. (18) tem and 9 41 A on march 2 604

## 422 Public Personnel Administration (3)

Prerequisite: Poli Sci 320. The civil service and the merit system; recruitment procedures and examinations; position classification, salary structures, retirement plans, in-service training, employee organizations and personnel supervision.

### 426 Collective Bargaining in the Public Sector (3)

Prerequisite: Poli Sci 320. Bargaining in the public sector; principles, practices, problems in negotiating labor contracts; mediation, conciliation, fact-finding and arbitration settlement techniques; government as an intervenor, moderator and judge of last

### 427 Current Issues in Urban and Metropolitan Policy (3)

Policy issues and alternatives in urban and metropolitan problem areas such as law enforcement, transportation, housing or poverinstitutions, including executive, legislative and judicing branches, media, political parties and pressure groups.

### 430T Government Politics of a Selected Nation-State (3)

Prerequisite: Poli Sci 330 or consent of instructor. The political institutions and processes of a selected nation-state. May be repeated for credit.

### 431T Government and Politics of a Selected Area (3)

Prerequisite: Poli Sci 330 or consent of instructor. A systematic analysis of individual nation-states set against the backdrop of history, culture and economic circumstances in each case. May be repeated for credit.

### 432 Gender Issues in Organization Theory (3)

Prerequisite: Poli Sci 320 or consent of instructor. Focuses on organizational behavior where sex differences may exist - including decision-making, leadership, mentoring, recruitment and training. Attention also devoted to topics of current interest — including comparable worth, job sharing, flexitime.

### 440 Political Ideologies and Attitudes (3)

Prerequisite: Poli Sci 100. Political culture as it forms the basis of attitudes and ideologies which predict political directions. The historical evolution of modern ideologies such as liberalism, democracy, communism, socialism and fascism.

### 443 The Theory and Philosophy of Marxism (3)

Prerequisite: Poli Sci 340. Marxist theory and philosophy from its 

### 446 Corruption, Ethics and Public Policy (3)

Ethical problems which face persons in the public service. The focus is on practical decision-making.

#### 447 Revolutions in Latin America (3)

Prerequisite: Poli Sci 100. Comparative examination of selected movements of revolutionary change in Latin America, emphasizing relation of theory and practice. Examples: Mexico, Cuba, Chile, Nicaragua, El Salvador and Guatemala.

### 448 Politics and the Media (3)

Prerequisite: Poli Sci 100. This course examines the structure and influence of the media in campaigns and in government. Key topics include: the relationship between media and politicians; the use of campaign advertising; and the stature and limits of investigative journalism. And the another strong is not sent from

### 451T Problems in International Politics (3)

Prerequisite: Poli Sci 350. Selected contemporary problems in world politics. See department bulletin for subject focus each semester. May be repeated for credit.

### 452T Foreign Policy of a Selected Country or Group of Countries (3)

Objectives, capabilities, policy-making processes and implementation of the foreign policies of a particular country or group of countries. Focus may be on United States, Soviet Union, Latin America or other countries or areas. May be repeated for credit.

### 453 International Conflict, War and Peace (3)

Prerequisites: Poli Sci 350 or 352. Knowledge of 20th century world history desirable. Conflicts between countries are endemic in international relations. Some conflicts lead to war while others are resolved peacefully. What are the causes of war? How can a more peaceful world order be created?

### 456 The National Security Establishment (3)

Conflicting theories of national security, the functions of defense and intelligence bureaucracies in foreign and domestic policy making, problems of arms control and the dangers to democratic values and institutions posed by the technology of national security.

### 457 Politics of International Economics (3)

Prerequisite: Economics 100 or consent of instructor. The link between economics and international politics. The political economy of free trade and imperialism, of neo-colonialism and foreign aid.

### 460 The Chicano and Politics (3)

(Same as Chicano 460)

### 461 The United Nations and Other Public International Organizations (3)

Prerequisite: Poli Sci 350. Structure, functions, and political processes of the United Nations, various specialized organizations such as the World Bank, and regional organizations such as the European Community, albert deponds sometos labitalog vans

### 470 Judicial Process (3)

Prerequisite: Poli Sci 375 or consent of instructor. The nature, functions and roles of courts in the political system; the nature, functions and roles of major participants in the American legal system, including judges, attorneys and citizens. empirical approaches to the study of politics

### 473 Introduction to Constitutional Law (3)

The role of the courts, the presidency, Congress and the states within the U.S. constitutional system. Topics include judicial review, presidential impoundment and impeachment, presidential foreign and military powers, regulation of the economy and public morals, and congressional investigations.

### 474 Seminar in Constitutional Law: Civil Rights and Civil Liberties (3)

Prerequisite: Poli Sci 375 or consent of instructor. Political analysis of case studies in constitutional rights and liberties with particular attention to relationships between the individual and government under the Bill of Rights and the 14th Amendment. Topics include economic regulation, criminal justice, privacy, gender and racial discrimination.

### 475 Administrative Law (3)

Prerequisite: Poli Sci 320 or 375 or consent of instructor. Law as it affects public officials and agencies in their relations with private citizens and the business community. Case materials and regulatory practices. The one bad you avail only no bas sanishes of

# 478 Urban Planning Principles (3) (Same as Geography 478)

### 481 Religion and Politics in the American Experience (3) (Same as Religious Studies 481)

### 484 Urban Planning Methods (3)

(Same as Geography 484)

485 Women and Politics (3) Prerequisite: Poli Sci 100. The changing political environment and women's role in elected, appointed and other public agencies; issues of particular concern to women, including "family" issues, comparable worth and other economic issues and political participation.

### 491 International Internship (3)

Prerequisites: Poli Sci 350 or 352 and skills appropriate to intern's duties. Eight hours work per week in a private agency concerned with international affairs or in a foreign consulate in Los Angeles. The intern meets with instructor periodically and writes a final paper describing and evaluating the internship experience.

### 492 Prelaw Internship (3)

Prerequisite: Poli Sci 100. Designed to acquaint students with the legal profession. A supervised working commitment of eight hours weekly with an assigned individual or organization.

494 Honors Tutorial in Politics (1) Prerequisites: senior standing and admission to Honors in Political Science. This is the core course for the Honors in Political Science program. Attendance at presentations by political scientists and critiques thereof. The culminating research for the Honors work will be presented in the tutorial.

### 497 Government Internship (3)

Prerequisites: Poli Sci 320 or 509. Students work 12-20 hours per week as supervised interns in a public agency. Supervision by the faculty and cooperating agency. In addition, a weekly seminar.

### 498 Political Internship (3)

Prerequisites: political science concentration and consent of intructor. Students work 8-12 hours per week with elected officials or candidates for elective office. Individual supervision by the faculty and cooperating individuals. Interns meet with instructor by arrangement. May be repeated for credit.

### 499 Independent Study (1-3)

Prerequisite: open to advanced students in political science with consent of department chair.

### 509 Administrative Organization and Process (3)

Prerequisite: consent of instructor. For graduate students in public administration who have not had an introductory course in public administration. Organizational theory and practice, decision making, systems analysis, performance evaluation and administrative improvement.

### 510 Computer Applications in Public Administration (3)

Prerequisite: Poli Sci 509. Designed to assist graduate students in public administration in understanding, using, and planning of automated systems in public agencies. Instructional fee.

### 511 Seminar in American Politics (3)

Prerequisite: consent of instructor. The political process in the United States.

### 519 State and Local Government (3)

The structure, processes, functions and interrelationships of state and local governments in American society. State, county, municipal and special district government in California as compared with other states.

### 521 Seminar in Public Administration Theory (3)

Prerequisites: admission to the MPA program. The concepts, models and ideologies of public administration within the larger political system. Course restricted to students in their final six units of graduate work.

### 522 Seminar in Public Personnel Administration (3)

Prerequisites: a course in basic statistics and Poli Sci 320 or 509. Topics in public personnel administration.

### 523 Administrative Research and Analysis (3)

Prerequisites: a course in basic statistics and Poli Sci 320 or 509. Conceptual methods employed in administrative research and analysis: Organization and procedure of surveys, performance evaluation, social impact assessment, computer data analysis and report writing.

### 525 Seminar in Metropolitan Area Government (3)

Prerequisites: a course in basic statistics and Poli Sci 320 or 509. Political and policy issues facing metropolitan America, and the capacity of governmental institutions to handle urban problems.

#### 526 Seminar in Administrative Behavior (3)

Prerequisites: a course in basic statistics and Poli Sci 320 or 509. Management oriented analysis of organizational behavior. Treatment of decision making, leadership, communication, group dynamics and ethical aspects of organization.

### 527 American Federalism and Intergovernmental Relations (3)

Prerequisite: Poli Sci 509 or consent of instructor. Involves a review of the theory and practice of both federalism and its most operational manifestation, the intergovernmental grant-in-aid system. Political dynamics, growth of the system and proposals for reform will be analyzed.

### 528 Seminar in Public Administration and Policy (3)

Prerequisites: Poli Sci 320 or 509. Interplay between public policy and program administration in federal government. Discussion of administrators' role in policy development, administrative discretion in implementing policy, use of political resources by administrators.

### 529 Seminar in Public Management Analysis (3)

Prerequisite: Poli Sci 523. Application of quantitative techniques to management and planning of public organizations. Topics include network analysis, capacity management, management information systems, productivity measurement, forecasting, cost-benefit analysis, simulation and marketing.

### 530 Seminar in Cross-National Politics (3)

Prerequisites: consent of instructor. The integration of international relations and comparative politics, emphasizing the interdependence of nations and non-state actors in the world political system.

### 540 Seminar Readings in Political Philosophy (3)

Prerequisite: undergraduate preparation in political theory or philosophy. This course examines the foundations of contemporary political science through readings in the classics of political philosophy.

### 541 Seminar in Contemporary Political Theory (3)

Analysis of contemporary trends in the study of politics. Emphasis on behavioral political science, criticisms of it and current empirical approaches to the study of politics.

### 571 Seminar in Public Finance (3)

Prerequisites: Poli Sci 509. Surveys state and local budgeting and taxes. Teaches local financial management and cost benefit analysis. Emphasis on local government in southern California.

### 572 Seminar in Public Sector Human

Resource Management (3)

Prerequisite: Poli Sci 509 and graduate standing. MPA students who have taken Poli Sci 422 for credit on study plan may not also take this course as part of study plan. Examines the political and legal environments of public personnel management, the general and career civil services and political appointment system and introduces the students to such personnel functions as selection, position classification, performance evaluation and compensation.

580 Emergency Management in Public Administration (3) Prerequisites: Poli Sci 509 or consent of instructor. A comprehensive review of the state-of-the-art in prevention, warning, evacuation, rescue and recovery systems. Covers the development of public policy relating to land use planning, recovery and issues of liability; intergovernmental relations and effective planning.

597 Project (3)
Prerequisite: consent of instructor.

598 Thesis (3-6) Prerequisite: consent of instructor.

599 Independent Graduate Research (1-3)

Prerequisite: consent of department chair. To be taken only after or concurrent with the completion of the required 15 units of graduate seminars.

# Department of Psychology

Department Chair: Daniel W. Kee
Department Office: Humanities 830M
Advisement Office: Humanities 520
Graduate Office: Humanities 830L

Programs Offered Bachelor of Arts in Psychology Minor in Psychology Master of Arts in Psychology Master of Science in Psychology

### Faculty

Frank Bagrash, Kay Bathurst, Michael Birnbaum, Chris Cozby, Peter Ebersole, Allen Gottfried, Jinni Harrigan, Daniel Kee, Dennis Keefe, Richard Lindley, Carol Lindquist, Richard Lippa, Richard McFarland, Jack Mearns, Lisa Mori, Douglas Navarick, David Perkins, Ronald Riggio, Michael Scavio, Don Schweitzer, Nancy Segal, William Smith, Edward Stearns, William Vandament, George Watson, Margaret White, Stanley Woll

### Advisers

Undergraduate: William Smith Graduate MA Coordinator: Ronald Riggio Graduate MS Coordinator: Carol Ummel Lindquist

### INTRODUCTION

Psychology is a science that has as its central theme the study of behavior. Psychology involves studying about how we interact with one another and our environment. Psychology is practical; it is concerned with improving the quality of life. In order to achieve these ends psychologists work in a broad range of research and applied settings. The psychology major is designed to provide each student with a comprehensive overview of the major fields of psychology and methods used in psychological research. The major is also designed to assist the student in selecting elective courses which can form a concentration in an area of the student's interest. These specialty areas might include clinical/community, social, developmental/child, industrial/organizational, learning/cognitive and physiological psychology. The major provides a basis for careers in a variety of psychology related occupations including mental health agencies, hospitals, teaching, business and public organizations. The major also prepares students for graduate training in fields such as clinical psychology; marriage, family and child counseling; teaching; social work; law; business and management and public administration.



All students who declare psychology as their major should meet with one of the undergraduate advisement coordinators during their first semester to develop a study plan. Students should also obtain a copy of the Psychology Department Student Handbook from the department office. Early consultation with an adviser is especially important for those interested in pursuing graduate training, careers in psychology or related fields, teaching credentials or a double major or minor.

Community College Transfer Students: A maximum of nine lower division units of psychology courses may be applied toward the 38 units required for the psychology major. The nine units must fit the course description requirements listed in this catalog for Psych 101, 201 and 202. Additional lower-division units taken in psychology at a community college and approved by the university may be used for university credit for graduation.

### Credential Information

The Department of Psychology offers both an approved waiver program for the multiple subject (elementary) teaching credential and an approved waiver program for the single subject (secondary) teaching credential.

Students interested in majoring in psychology and preparing for an elementary or secondary teaching credential should contact the psychology undergraduate advisement coordinator and the Office of Admission to Teacher Education.

### **BACHELOR OF ARTS IN PSYCHOLOGY**

### Lower Division (9 units required)

Psychology 101 Introductory Psychology (3) Psychology 201 Elementary Statistics (3)

Psychology 202 Research Methods in Psychology (3)

### Upper Division (30 units required)

Required Courses (18 units)

One of the following four laboratory courses (3 units):

Psychology 303 Sensation and Perception (3)

Psychology 304 Comparative Animal Behavior (3)

Psychology 305 Information Processing (3)

Psychology 306 Physiological Psychology (3)

One of the following three courses (3 units):

Psychology 331 Psychology of Personality (3)

Psychology 351 Social Psychology (3)

Psychology 361 Developmental Psychology (3)

Each of the following four courses:

Psychology 300 Computer Applications in Psychology (3)

Psychology 302 Learning and Memory (3)

Psychology 408 History of Psychology (3)

Psychology 461 Psychological Testing (3)

Elective Courses (12 units)

A full range of options is available for the 12 units of psychology upper-division (300/400 level) electives. These courses should form an area of concentration for students and should be selected in consultation with a psychology adviser.

### Special Requirements

Each course counted toward the major must be completed with a grade of C or higher. No more than a total of three units of either independent study or independent research (Psychology 498 or 499) may be applied toward the major. No more than three units of internship (Psychology 495) may be applied toward the major. A minimum of 18 units counted toward the psychology major must have been completed at CSUF.

### MINOR IN PSYCHOLOGY

### Lower Division (6 units)

Psychology 101 Introductory Psychology (3)

Psychology 202 Research Methods in Psychology (3)

### Upper Division (6 units)

One of the following courses (3 units):

Psychology 302 Learning and Memory (3)

Psychology 303 Sensation and Perception (3)

Psychology 304 Comparative Animal Behavior (3)

Psychology 305 Information Processing (3)

Psychology 306 Physiological Psychology (3)

Psychology 363 Experimental Child Psychology (3)

### One of the following courses (3 units):

Psychology 331 Psychology of Personality (3)

Abnormal Psychology (3) Psychology 341

Social Psychology (3) Psychology 351

Psychology 361 Developmental Psychology (3)

#### Electives (9 units)

Students completing the minor may choose 9 units of upperdivision psychology courses or 6 units of upper-division courses and Psychology 201 Elementary Statistics.

#### Special Requirements

The special requirements that are listed under the major apply to the minor as well.

#### Other Minors

The Psychology Department is a participant in minors in gerontology and women's studies. Course work that is applied toward the major may not also be applied toward the minor.

### MASTER OF ARTS IN PSYCHOLOGY

The degree program provides advanced course work and research training in core areas of psychology. Completion of the MA can facilitate application to Ph.D. programs in psychology and provides skills important to careers in education, the health professions and industry.

### Admission to Graduate Standing: Classified

An applicant who meets the requirements listed below, in conjunction with the development of an approved study plan, may be evaluated for classified graduate standing.

- A. Satisfaction of the general prerequisites for graduate studies which include a baccalaureate degree from a regionally accredited institution and a grade point average of at least 2.5 in the last 60 semester units attempted (see the catalog section on Graduate Admissions for complete details).
- B. A 2.5 overall grade-point average and a 3.0 average in psychology.
- C. Approved lower-division equivalent courses involving the following psychology classes: (atlant 6) not lived rewo.]
- 1. Elementary Statistics (e.g. Psychology 201)
  - 2. Research Methods (e.g., Psychology 202)
- D. Approved upper-division equivalent course work which includes classes in the history of psychology (e.g., Psychology 408) and advanced statistics (e.g., Psychology 465). Also four additional psychology classes completed from the areas below; classes must be from different areas and one must be a lab class:
  - 1. Learning and Memory
  - 2. Cognition/Information Processing
  - 3. Sensation & Perception/Physiological
  - 4. Social/Personality
  - 5. Developmental production of the productive of
  - 6. Abnormal/Clinical paradology 150 yolodoya
- E. Satisfactory performance in the General and Advanced/Subject Psychology Tests of the Graduate Record Examination
- F. Three satisfactory letters of recommendation. One must be from a psychology professor.
- G. Passing the university's Examination in Writing Proficiency (EWP).

Invitation to the program is based on competitive evaluation of qualifications and is at the sole discretion of the Psychology Department's Graduate Studies Committee. New students are admitted to the Master of Arts program in the fall only. Both the university and department applications must be completed on time for full consideration. Application deadline for the return of all materials is March 15 for the fall semester. Departmental forms may be obtained from the Graduate Office of the Psychology Department.

### Admissions to Graduate Standing: Conditionally Classified

It may be possible for an applicant with minimal deficiencies in prerequisite requirements, but who is otherwise highly qualified, to be admitted conditionally to the program. Provisions for the removal of these deficiencies would be outlined as part of the conditional acceptance. When the deficiencies have been successfully removed, a regular invitation to join the program as a classified graduate student may be offered after review by the department's Graduate Studies Committee.

### Study Plan

The Master of Arts in Psychology requires a minimum of 30 units of approved graduate work, including the completion and acceptance by the department of a written thesis which has been defended orally.

Each student, in consultation with the graduate coordinator and a faculty mentor, will develop a program of study. This program will be outlined on an official university study plan form and submitted to the department's Graduate Studies Committee for review and approval.

	Unit
	Issues and Perspectives in Research
Psychology 599	Independent Graduate
Psychology 510	Experimental Design
Psychology 500-	Experimental Design
	Thombreak astern SEV Roll Will would
required:	seminars from the following list are
Psychology 52	20 Seminar: Experimental Psychology
rsvchology 32	1 Seminar: reisonality
2 1 1 20	2 Seminar: Developmental Psychology
Psychology 52	
rsvchology 32	21 Seminar: Personality 22 Seminar: Developmental Psychology

completed from the following categories: 128 golodows

Experimental/Cognitive Social/Personality/Industrial 00 1001 grawoffol and to shad Clinical/Community Community Communi Psychology 302 Learning and Memory (3 Istnamqolaya) Quantitative Sensory Processes/Physiological

Psychology 500-Level Elective Class
and Psychology 598 Thesis Research (3 units)
or Psychology 598 Thesis Research (3/3 units) 6
Total

<sup>\*</sup>A list of qualifying classes for each category is available from the psychology graduate office. 500-level classes in psychology may be substituted with permission of the graduate adviser.

Students must complete Psychology 500 within their first two semesters in the program. To be advanced to candidacy for the M.A. Degree, students must have received a grade of "B" or better in all study plan classes and maintain a 3.0 grade-point average overall. A successful oral defense of the thesis is also required. obaco Darenber Cadarfano untribanco bno actrom tros

Following university regulations, a maximum of five years is normally allowed for completion of course work and other requirements.

For further details, contact the graduate program adviser of the Department of Psychology. The sed season members which another dent's effectiveness as well as professional and ethical behavior in

### MASTER OF SCIENCE IN CLINICAL PSYCHOLOGY

The Master of Science program combines training in both scientific and applied areas of clinical psychology. It is based on the scientist-practitioner model and also provides preparation for professional work in a variety of settings. It also prepares the student for doctoral programs in both academic and professional schools in clinical psychology. The program requires a thesis and provides supervised fieldwork experience. Completion of the coursework with all indicated electives prepare the student for Marriage, Family, Child Counseling (MFCC) intern registration. Additional coursework must be taken to qualify the student for the MFCC license as it is currently defined.

### Admission to Graduate Standing: Classified

An applicant who meets the following requirements may be considered for classified graduate standing upon development of an approved study plan: Is home amounted the student and I

- A. satisfaction of the general prerequisites for graduate work which include a baccalaureate degree from a regionally accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted (see section of this catalog on Graduate Admissions for complete statement and procedures);
- B. a 2.5 overall grade point average and a 3.0 average in psychology; memstant and 100 yaclorless unmanufacture
- C. a major in psychology or approved equivalent course work of 33 units involving the following courses:

Lower Division (9 units)

Introductory Psychology Psychology 101

Psychology 201

Elementary Statistics
Research Methods in Psychology\* Psychology 202

Upper Division (24 units) Students in constitution with their program solvier, si

Psychology 302 Learning and Memory

Psychology 303 Sensation and Perception

or Psychology 304 Comparative Animal Behavior

or Psychology 305 Information Processing

or Psychology 306 Physiological Psychology

Psychology 331 Psychology of Personality

or Psychology 351 Social Psychology

or Psychology 361 Developmental Psychology

Psychology 341 Abnormal Psychology\*

Psychology 461 Psychological Testing\*

Psychology 465 Advanced Statistics\* Psychology 495 Field Placement in Psychology or an

elective if you have qualifying experience\*

An upper-division psychology elective

- D. satisfactory performance in the General and Advanced Psychology Tests of the Graduate Record Examination;
- E. three satisfactory letters of recommendation;
- F. passing the university's EWP (Examination in Writing Proficiency).
- G. paid or volunteer experience in human services. Psychology 594B Fieldwork .. (Clare

New students are admitted to the Master of Science program in the fall. Those to be admitted will be selected in the spring from the most qualified applicants at the sole discretion of the department's Graduate Studies Committee. An interview of the finalists is required. In addition to the university application, a departmental application form, obtainable by mail from the Psychology Department's graduate office, must be completed and returned to that office. The application deadline for the return of all materials including GRE scores is March 15 for fall semester entry. Transcript madelob Andreablist D & Got agoloches the

### Admission to Graduate Standing: Conditionally Classified

It may be possible for applicants who have minimal deficiencies in prerequisite requirements, as detailed above, but who are otherwise highly qualified, to be admitted in conditionally classified graduate standing, with provisions made for removal of deficiencies prior to the granting of classified standing. For further information, consult the graduate program adviser. In shield makes ad

<sup>\*</sup>Psychology majors are required to ensure that their coursework includes research methods, abnormal psychology, psychological testing, advanced statistics, and su-

### Study Plan

The Master of Science in Psychology requires 48 units of approved graduate work, including the completion and acceptance by the Psychology Department's Graduate Studies Committee of a thesis including a successful oral defense of the thesis.

Students in consultation with their program adviser, shall develop a study plan which will be submitted to the Graduate Studies Committee of the Department of Psychology for approval. To be advanced to candidacy, students must receive a grade of "B" or better on all study plan courses.

### Course Requirements

I. Research Core (7 units)

1.	research core (1	uiiics)	inis
	Psychological Res Psychology 510	Issues and Perspectives in seach	. 3
II.	Seminar Series .	An appearance on psychology elect	. 6
	Two seminars from	n the following list are required:	
	Psychology 521 Psychology 522	Seminar: Experimental Psychology Seminar: Personality Seminar: Developmental Psychology Seminar: Social Psychology	
III.	Clinical Core (10	units)	
	Psychology 569 Psychology 594A	Law and Ethics in Clinical  Cross Cultural Psychology**  Fieldwork**  Fieldwork**	. 2
IV.	Electives (19 unit	full. Those to be admirted will be well most qualified applicants at the sole $\mathbf{z}$	
	Psychology 543 Psychology 545 Psychology 547	Advanced Lifespan Development ** Advanced Psychopathology ** Theories of Psychological	. 3
		n, apilio, energraphica differ, a	
		Psychotherapy Techniques ** Marriage, Family and Child Therapy **	
	Psychology 560	Child and Adolescent Treatment ** Substance Abuse **	. 3
V.	Thesis (6 units)		
	Psychology 598	Thesis	

<sup>\*</sup>These electives are necessary for the Board of Behavioral Science requirements for MFCC licensing. Courses in sexual dysfunction and child abuse reporting must be taken outside of the program in order to meet MFCC requirements.

Students must complete the Psychology 500 research course during their first semester in the program. The program involves intensive fieldwork experience in clinical settings, emphasizing careful supervision which includes weekly meetings with both Psychology Department faculty and off-campus fieldwork supervisors.

The Psychology Department's mentor program facilitates students' early involvement in research, helps students develop their thesis topic, and provides academic and career counseling in areas of emphasis in psychology. New students, in consultation with the coordinator, select a mentor prior to their second semester in the program. Students may change mentors at any time by obtaining the agreement of the new mentor, informing the current mentor, and consulting with the Graduate Coordinator. It is anticipated that students' mentor will serve as their thesis adviser in the second year. However, students are free to select a different person for their adviser.

It should be noted that successful completion of the course work is not sufficient to permit continuation in the program. In addition, faculty judgment must be satisfied with respect to the student's effectiveness as well as professional and ethical behavior in dealing with potential clients. Continuation in the program is contingent upon satisfactory performance in all aspects of the program as judged by the Graduate Studies Committee.

### **Psychology Courses**

### 101 Introductory Psychology (3)

Basic concepts, problems, and methods in psychology. Perception, learning, measurement, cognitive processes, development, motivation, personality, abnormal behavior, physiological and social psychology. (CAN PSY 2)

#### 110 Reasoning and Problem Solving (3)

The nature of critical thinking, models and strategies; common fallacies of reasoning, self-regulation in the thinking process; application of critical thinking to specific areas.

### 201 Elementary Statistics (3)

Descriptive statistics, hypothesis testing, analysis of variance, correlational techniques.

### 202 Research Methods in Psychology (3)

Prerequisite: Psychology 101 and prior completion or concurrent enrollment in Psychology 201. The fundamentals of psychological research methods. Participation in conducting experiments, analyzing data, interpreting results, and writing research reports. (2 hours lecture, 3 hours laboratory) 210 Psychology of Military Leadership (3)

Psychological theories, models and concepts of leadership and management as applied to the military. Style and role of the military leader in applying principles of motivation, organizational behavior and participative group management. No credit toward the major in psychology. (Same as Military Science 210).

### 300 Computer Applications in Psychology (3) (Formerly 300A)

Prerequisites: completion of general education math requirement and prior completion or concurrent enrollment in Psychology 101. General introduction to the use of computers in psychology. Selection and use of application programs in research, statistics and testing will be emphasized.

302 Learning and Memory (3)

Prerequisites: Psychology 101, 201, 202, or consent of instructor. Theoretical and experimental investigations in learning, memory, thinking, problem solving and motivation. Written research reports required. (2 hours lecture, 3 hours laboratory)

303 Sensation and Perception (3)

Prerequisites: Psychology 101, 201, 202 or consent of instructor. Theoretical and experimental investigations in sensory and perceptual processes, including vision and audition. (2 hours lecture, 3 hours laboratory)

304 Comparative Animal Behavior (3)

Prerequisites: Psychology 101, 201, 202 or consent of instructor. Theoretical and experimental investigations in animal behavior, including humans. The interspecies comparisons of behavior and sensory, motor, endocrine and neural structures. (2 hours lecture, 3 hours laboratory; one or more field trips required)

305 Information Processing (3)

Prerequisites: Psychology 101, 201, 202 or consent of instructor. Theoretical and experimental investigations of the representation, structure, and utilization of information in humans. (2 hours lecture, 3 hours laboratory)

306 Physiological Psychology (3)

Prerequisite: Psychology 202 or Biological Science 101 or equivalent. Anatomy and physiology of the nervous system, role of neural and humoral agents in complex behavior. Relation between behavioral and biological processes. (2 hours lecture, 3 hours laboratory)

310 Psychology of Women (3)

Prerequisite: Psychology 101. Survey of theories, research and implications for the psychological study of gender differences and similarities, particularly as pertains to the psychological characteristics and problems of women.

311 Educational Psychology (3)

Prerequisite: Psychology 101. Application of psychological research and theory to educational processes, including learning, motivation, individual differences, teaching methods and evaluation.

312 The Psychology of Human Sexual Behavior (3)

Prerequisite: Psychology 101. Topics in human sexual behavior integrating sexuality as social, clinical, developmental and biological. Gender identity, sexual behavior, love and attraction, sexual deviation, causes and treatment of sexual dysfunction, sexual exploitation.

331 Psychology of Personality (3)

Prerequisite: Psychology 101. Broad survey of research, theory and assessment techniques in the area of personality.

341 Abnormal Psychology (3)

Prerequisite: Psychology 101. Symptoms, causes, treatment and prevention of mental problems; the anxiety disorders, the personality disorders, psychophysiological disorders, psychoses, substance use disorders, sexual disorders and organic disorders.

350 Environmental Psychology (3)

Prerequisite: Psychology 101 or consent of instructor. Theory, research and method in the study of behavior-environment relationships. The influence of such variables as population density and urban design on human behavior.

351 Social Psychology (3)

Prerequisite: Psychology 101. Phenomena related to social behavior and social influences on behavior. Topics include social perception and cognition, attitudes and attitude change, attraction, altruism, aggression, interpersonal influence, and group processes.

361 Developmental Psychology (3)

Prerequisite: Psychology 101. Psychological and physical development. Theories, methods and research findings regarding the development of perception, cognition, learning, personality and social behavior.

362 Psychology of Aging (3)

Prerequisite: Psychology 101. Characteristics of humans during the adult years. Topics include physical, intellectual, cognitive, personal, social and psychological development, vocational and family changes, retirement and death.

363 Experimental Child Psychology (3)

Prerequisites: Psychology 101 and two of the following: Psychology 361, Child Development 312, 320, 330 or 325. Research methodology in developmental psychology. Critical examination of empirical studies. Design and excution of an empirical investigation. (2 hours lecture, 3 hours laboratory) (Same as Child Development 363)

364 Intelligence: A Life-span Perspective (3)

Prerequisite: Psychology 101 or consent of instructor. Nature, determinants and consequences of intelligence. Sociopolitical aspects of the testing movement. Stability, change and prediction of IQ, social and biological influences, educational and occupational consequences, genetic vs. environmental controversy.

391 Industrial/Organizational Psychology (3)

Prerequisite: Psychology 101. Traditional and current psychological principles and techniques in industrial and business settings. Selection, placement, training, work motivation, human factors, environmental influences, leadership, work stress, organizational communication, problems of people at work, organizational development and consumer behavior.

400 Advanced Research Issues in Psychology (1)

Prerequisites: Psychology 201 and 202 and consent of instructor. Topics selected from current theory and research developments in psychology. Study of professional issues in psychology including methodological and ethical procedures in the conduct of research and practical applications of psychological research theories and methods. Usually taken in conjunction with Psychology 498, 499, or 599 (Independent Study/Research). May be repeated for credit.

408 History of Psychology (3)

Prerequisite: Completion of nine units of upper division psychology courses. The development of psychology from early times to the present; major traditions and conceptual issues.

413 Perception (3)

Prerequisite: Psychology 303 or consent of instructor. Advanced treatment of contemporary theoretical and research problems in perception.

415 Cognitive Processes (3)

Prerequisites: Psychology 302, 303 or consent of instructor. Theory and research with respect to problem solving, thinking, concept learning, language, decision making and judgment, cognitive structure, cognitive development.

417 Psycholinguistics (3)

Prerequisite: six hours of upper-division work in psychology or linguistics, or consent of the instructor. Psychological and linguistic approaches to the study of language. Innate and learned aspects of language development, motivational and social aspects of language, symbolism, language disorders and universals. (Same as Linguistics 417)

431 Theories of Personality (3)

Prerequisite: Psychology 331. Traditional and contemporary theories of personality, including psychoanalytic, humanistic-existential, behavioral, trait and social interaction approaches.

451 Experimental Social Psychology (3)

Prerequisites: Psychology 201 or equivalent, 202 and either 351 or 391. Topics in social behavior, group processes and influences. Laboratory experiments in attitude formation and change; group processes such as communication, problem solving, and norm formation; interpersonal influence and perception. (2 hours lecture, 3 hours laboratory)

454 Social Cognition (3)

Prerequisite: Psychology 351 or 415. Theory and research on the processing and representation of social information. Topics include impression formation, stereotyping, attribution theory, the self, political cognition, and developmental issues.

461 Psychological Testing (3) 101 polodoval restrictions

Prerequisite: Psychology 201 or equivalent. Intelligence, aptitude, interest, and personality testing. Theory, construction, evaluation, interpretation and uses of psychological tests.

464 Advanced Developmental Psychology (3)

Prerequisites: Psychology 361 or Child Development 312 and consent of instructor. Review and analysis of major theoretical and empirical issues in child developmental psychology.

465 Advanced Psychological Statistics (3)

Prerequisite: Psychology 201. General linear model, regression, analysis of variance techniques and applications to research design and evaluation of data. Instructional fee.

466 Social Science Computer Applications (3)

Prerequisites: Psychology 201, 300A, 300B or consent of instructor. Computers in psychology. Batch processing; interactive computing; on-line experimentation. Instructional fee.

467 Multivariate Statistics for Psychology (3)

Prerequisite: Psychology 465 or consent of instructor. Bivariate and multivariate regression, multivariate analysis of variance, discriminant analysis, factor analysis, structural equations, and applications to psychological research.

472 Community Psychology (3)

Prerequisites: Psychology 101, 341, or consent of instructor. Theory and research. A survey of a variety of programs developed within this model; their service delivery aspects and the methodology of program evaluation.

473 Sleep, Dreams, and Behavior (3)

Prerequisites: Psychology 306, 331, 341 or consent of instructor. Scientific evidence regarding the role of sleep and dreams in controlling awake behavior is reviewed. Course topics include historical views and theories, the neurobiology of sleep and dreams, and their relationships to cognition, personality, and psychopathology.

### 474 Medical Psychology (3)

Prerequisites: Psychology 101 and 341 or consent of instructor. Behavioral medicine; neuropathology; clinical neuropsychology; psychosomatic, nutritional, endocrine and developmental disorders.

### 475 Psychopharmacology (3)

Prerequisite: Psychology 306 and 341 or 15 units of biological science. Basic principles underlying the use of drugs and related substances to modify experience and behavior. Psychological, medical and social potentialities and limitations of these techniques.

#### 476 Developmental Psychopathology and Assessment (3)

Prerequisite: Psychology 341 or 361 or consent of instructor. Psychopathology from a developmental perspective. Pathogenic influences during childhood. Causes, classification, incidence and research on behavior disorders and problems in childhood. Assessment approaches and techniques.

### 481 Survey of Clinical Psychology (3)

Prerequisites: Psychology 331, 341 or consent of instructor. Methods, diagnosis, therapeutic techniques, research, educational requirements, professional requirements, ethics.

### 495 Field Placement in Psychology (3)

Prerequisites: 12 units of psychology and consent of instructor. Supervised experience in an off-campus location. Class meetings will be spent discussing the fieldwork experience both from a practical and a theoretical standpoint. Application forms must be completed prior to enrollment. No more than three units of credit towards the major.

### 496 Student-to-Student Tutorials (1-3)

Consult "Student-to-Student Tutorials" in this catalog for more complete course descriptions.

### 498 Directed Lab Research (3)

Prerequisites: completion of one upper-division laboratory course in psychology and consent of instructor. Study plan must be approved by university census date. Individual laboratory investigation under direction of a faculty member. No more than three units of credit towards the major.

### 499 Independent Study (1-3)

Prerequisites: completion of at least one upper-division laboratory course in psychology and consent of instructor. Study plan must be approved by university census date. Individual library study under direction of a faculty member. No more than three units of credit toward the major.

### 499RIA Research in Action (4)

Prerequisite: consent of instructor. Applied research experience in appropriate public or private organizations, under faculty supervision. Group meetings and individual conferences with instructor.

### 500 Issues & Perspectives in Psychological Research (3)

Prerequisite: admission to the psychology graduate program and consent of instructor. Current theoretical, professional, and methodological issues in psychology.

### 510 Experimental Design (3)

Prerequisites: Psychology 201, 465 and admission to a psychology graduate program or consent of instructor. Principles and methods of planning and carrying out systematic investigations on the behavior of complex organisms, interdependence of experimental design and statistical evaluation of results. Practice in formulation of testable hypotheses.

### 511 Clinical Research Design (3)

Prerequisites: admission to the M.S. Clinical Program or consent of the instructor. Examination of the research designs and statistical methods used in psychology in general and in clinical psychology in particular. Students will present individual review papers as a part of the course requirements.

### 520 Seminar: Experimental Psychology (3)

Prerequisites: admission to a psychology graduate program or consent of instructor. Content of seminar varies each semester but is devoted to an examination of current topics within experimental psychology. May be repeated for credit.

### 521 Seminar: Personality (3)

Prerequisites: admission to a psychology graduate program or consent of instructor. Central problems in personality. May be repeated for credit.

### 522 Seminar: Developmental Psychology (3)

Prerequisites: admission to a psychology graduate program or consent of instructor. Theory and research in developmental psychology. May be repeated for credit.

### 523 Seminar: Social Psychology (3)

Prerequisites: admission to a psychology graduate program or consent of instructor. Central problems and major theories in the field of social psychology. May be repeated for credit.

#### 543 Advanced Lifespan Development (3)

Prerequisites: admission to the M.S. Clinical program or consent of the instructor. In-depth study of advanced lifespan development, theory and research.

#### 544A Psychodiagnostics A (3)

Prerequisite: admission to Master of Science Clinical program or consent of instructor. A skills course in assessment issues, giving and scoring objective diagnostic testing including WAIS-R, WISC-R, Stanford-Binet and MMPI. Integration of testing with other diagnostic material. (2 hours lecture, 3 hours laboratory)

#### 544B Psychodiagnostics B (3)

Prerequisites: admission to Master of Science Clinical program or consent of instructor and successful completion of Psychology 544A. A laboratory course covering administration, scoring, and interpretation of traditional projective tests and relevant issues in testing assessment and research. (2 hours lecture, 3 hours laboratory)

### 545 Advanced Psychopathology (3)

Prerequisites: Psychology 341 or equivalent and admission to either the Master of Science Clinical program or the Master of Arts Psychology program or consent of instructor. In-depth study of diagnosis, etiology theories, research and prevention of adult and child psychopathology.

### 547 Theories of Psychological Intervention (3)

Prerequisite: admission to Master of Science in Clinical program or consent of instructor. In-depth coverage of psychotherapy. Principle theoretical approaches covered are: Psychodynamic, humanistic, and behavioral/cognitive behavioral.

### 548 Psychotherapy Techniques (3)

Prerequisites: admission to the M.S. Clinical Program or consent of the instructor. A skills course in conducting diagnostic interviews and basic therapeutic techniques. Role playing and video feedback will play a central role in course. (2 hours lecture, 3 hours laboratory)

### 549 Marriage, Family and Child Therapy (3)

Prerequisites: satisfactory completion of the first semester of the Master of Science Psychology program. Marriage, family and child therapy: theory, techniques and research.

### 560 Child and Adolescent Treatment (3)

Prerequisites: completion of first year in M.S. Clinical Program or consent of instructor. Specific therapy techniques, including behavioral, and general approaches to the treatment of children and adolescents.

### 561 Community Psychology (3)

Prerequisite: admission to graduate program or admission to the Master of Science Clinical program or consent of instructor. Community psychology; its historical and philosophical roots, theoretical framework, research within the area, and current practical applications with particular emphasis on cross-cultural issues.

### 563 Law and Ethics in Clinical Psychology (2)

Prerequisites: Psychology 481 or equivalent and admission to the Graduate program or consent of instructor. In-depth study of the legal and ethical issues pertaining to clinical psychology. Existing standards, laws, as well as practical aspects will be examined.

### 568 Substance Abuse (1)

Prerequisite: admission to the graduate program or consent of instructor. The impact of alcoholism and drug abuse on the individual, family and community, clinical skills in the diagnosis and treatment of substance abuse, and research on diagnosis and outcome.

### 569 Cross Cultural Psychology (2)

Prerequisites: completion of first year of M.S. in Clinical program or consent of instructor. An in-depth study of cross-cultural issues as they apply to clinical psychology, specifically psychotherapy. Practical, research and theoretical issues will be examined.

### 575 Applied Developmental Psychology (3)

Prerequisite: graduate standing and consent of instructor. Contemporary topics merging research and practice in the fields of developmental and child clinical psychology. Topics include: parent/child competency training, pediatric psychology, prevention strategies for at risk children/families, children and the law, and role of developmental psychology in social policy.

### 594A,B Fieldwork (3,3) games to us at experience beginning

Prerequisite: satisfactory completion of first year's work in the Master of Science in Clinical program. Supervised clinical work in mental health agencies. (Minimum of 12 hours field experience per week.)

### 598 Thesis Research (3 or 6)

Prerequisites: formal advancement to candidacy and consent of instructor. Development of a proposal for a major piece of empirical research, execution of the study, analysis of the results and writing of a thesis.

### 599 Independent Graduate Research (1-3)

Prerequisites: admission to a psychology graduate program and consent of instructor. Empirical research in a selected area of psychology. Designed, conducted and written by the student with the collaboration of a member of the faculty. May be repeated for credit.

# Department of Religious Studies

Department Chair: Merrill Ring Department Office: Education Classroom 622

Programs Offered One deadgma naj esibute metarido dele Bachelor of Arts in Religious Studies Minor in Religious Studies Minor in Christian Studies Minor in Jewish Studies Minor in Peace Studies

### Faculty

Daniel Brown, Benjamin Hubbard, George Saint-Laurent, James Santucci, Bradley Starr

### Adviser

All programs: James Santucci

### INTRODUCTION ... someone of loss should reduce the outer some

Religious Studies examines the spiritual quest of humankind, especially as it has manifested itself in the world's living religions. These include Hinduism, Buddhism, Judaism, Christianity, Islam, and non-traditional movements such as Scientology and the Unification Church. No other academic field looks at the origins, sacred writings, rituals, beliefs and worldview of the various religions for their own sake rather than as an aspect of another field of study.

Within a public university, religion must be approached with academic objectivity and without favoritism for any one tradition. Yet, religion must also be studied with sensitivity and empathy for different religions and for the millions of believers whose lives are shaped by their faith. Religious Studies is also an interdisciplinary field which draws on the work of social scientists, historians, philosophers, and literary scholars in attempting to understand the religious quest. Hence, studying religious traditions develops habits of mind that are very important for life in our multi-cultural society. Furthermore, a familiarity with the world's religions is necessary for an understanding of church-state issues in America and of geopolitical conflicts in such areas as northern Ireland, the Mideast, India, Eastern Europe and elsewhere.

The Bachelor of Arts in Religious Studies is designed for those who (1) want a humanities undergraduate background focusing on religion as a preparation for further study in such fields as law, social work, counseling and government service; (2) wish to pursue graduate studies in religion with the aim of teaching and/ or doing research in the subject; (3) are considering a career in the ministry/rabbinate or in religious education.

Minors in religion are offered in four areas depending on a student's particular interest: Religious Studies (comparative emphasis), Christian Studies (an emphasis on Christianity in its many forms), Jewish Studies (an emphasis on the Jewish tradition) and Peace Studies (an emphasis on the causes of societal conflict and on its resolution, especially by pivotal religious figures).

### Awards in Religious Studies

Two graduating seniors are recognized each year with the James O'Shea/Joseph Kalir Award for Outstanding Scholarship and the James Parkes/Morton Fierman Award for Student Achievement (for service to the department and university and/or for interfaith work within and outside the university). In addition, the Donald Gard Award is given annually to a non-graduating Religious Studies major for academic achievement.

### BACHELOR OF ARTS IN RELIGIOUS STUDIES

The Bachelor of Arts in Religious Studies consists of 33 units. Courses in other schools and departments may be acceptable upon consultation with the departmental adviser. Each course counted toward the major must be completed with a grade of C or higher.

### Lower Division Requirements (9 units)

Introduction to the Study of Religion (3 units)

Religious Studies 105 The Sacred Quest for Human Meaning (3)

Religious Studies 110 The World's Great Religions (3)

Introduction to Western Religious Traditions (3 units)

Religious Studies 200 Introduction to Christianity (3)

Religious Studies 201 Origins of the New Testament (3)

Religious Studies 210 Introduction to Judaism (3)

Religious Studies 250 The Religion of Islam (3)

Introduction to Non-western Religious Traditions (3 units)

Religious Studies 270T Introduction to the Oriental Religions (3)

Religious Studies 280 Introduction to Buddhism (3)

#### Upper Division Requirements (24 units)

Core Requirements (6 units)

Religious Studies 300 Methodologies of Religious Studies (3)

Religious Studies 485T Major Religious Thinkers and Concepts (3)

or Religious Studies 486 History and Methods of Religious Studies (3)

The Development of Western Religious Thought (6 units)

Religious Studies 345A History and Development of Christian Thought: The Beginning to 1274 (3)

Religious Studies 345B History and Development of Christian Thought: 1275 to the Present (3)

Religious Studies 346A History and Development of Jewish Thought: Biblical Origins to Maimonides (3)

Religious Studies 346B History and Development of Jewish Thought: 1204 to the Present (3)

Religious Studies 349A History and Development of Islamic Thought: The Beginning to 1258 (3)

Religious Studies 349B History and Development of Islamic Thought: 1259 to Modern Times (3)

Religious Studies 350T Major Christian Traditions (3)

History/Religious Studies 405 History of the Jews (3)

History/Religious Studies 417B Roman Empire (3)

History/Religious Studies 420 The Byzantine Empire (3)

History/Religious Studies 421A History of the Christian Church to 1025 (3)

History/Religious Studies 421B History of the Christian Church from 1025 to the Present (3)

History/Religious Studies 425B The Reformation (3)

History/Religious Studies 466A Islamic Civilization: Arab Era (3)

History/Religious Studies 466B Islamic Civilization: Imperial Age (3)

History/Religious Studies 483 American Religious History (3)

The Development of Non-western Religious Thought (6 units)

Afro/Religious Studies 325 African-American Religion (3) Afro/Religious Studies 437 American Indian Religions and Philosophy (3)

Religious Studies 347A History and Development of Hinduism to 1200 (3)

Religious Studies 347B History and Development of Hinduism from 1200 (3)

Philosophy 350 Oriental Philosophy (3)

Religious Studies 370 Modern Non-traditional Religious

Movements in American (3)

History/Religious Studies 465A History of India (3)

History/Religious Studies 465B History of India (3)

### The Experience of Religion (6 units)

Religious Studies 310 Introduction to Peace Studies (3)

Comp Lit/Religious Studies 312 The Bible as Literature (3) Afro/Religious Studies 325 African-American Religion (3)

Religious Studies 330T Hebrew Scriptural Studies (3)

Religious Studies 331T New Testament Studies (3)

Religious Studies 335 Judaism, Christianity, and Islam Compared (3)

Religious Studies 343 Religion and Current Ethical Issues (3) Philosophy/Religious Studies 348 Philosophy of Religion (3)

Religious Studies 358 Comparative Mysticism (3)

Religious Studies 376 Dimensions of Religious Experience (3)

Religious Studies 380 The Religious Roots of Nonviolence (3) Total solution of the state of the state

Religious Studies 390 Religion, the Media, and Contemporary Culture (3)

Geography/Religious Studies 366 Geography of Religion (3) Anthro/Religious Studies 419 Shamanism in Cross-cultural Perspective (3) no amino to assemble 204 subside more mA

Religious Studies 428 Great Religious Peace-makers (3) Sociology/Religious Studies 458 Sociology of Religious Behavior (3)

Religious Studies 476 Understanding the Holocaust (3) Religious Studies 481 Religion and Politics in the American Experience (3)

#### Writing Requirement

The course requirement of the university upper-division baccalaureate writing course is met through Religious Studies 485Tor Religious Studies 486. 1250 To most betooled of them required

It is highly recommended that students majoring in Religious Studies pursue the study of classical languages such as Latin, Greek, Hebrew, Arabic, and Sanskrit, when such languages are offered.

# MINOR IN RELIGIOUS STUDIES

Students minoring in Religious Studies are required to take 21 units in Religious Studies, distributed as follows:

# Lower Division Requirements (9 units)

Introduction to the Study of Religion (3 units)

Religious Studies 105 The Sacred Quest for Human Meaning (3)

Religious Studies 110 The World's Great Religions (3)

Introduction to Western Religious Traditions (3 units)

Religious Studies 200 Introduction to Christianity (3)

Religious Studies 201 Origins of the New Testament (3) Religious Studies 210 Introduction to Judaism (3)

Religious Studies 250 The Religion of Islam (3)

Introduction to Non-western Religious Traditions (3 units)

Religious Studies 270T Introduction to Oriental Religions (3)

Religious Studies 280 Introduction to Buddhism (3)

#### Upper Division (12 units)

Core Requirements (3 units)

Religious Studies 485T Major Religious Thinkers and Concepts (3)

Religious Studies 486 History and Methods of Religious Studies (3)

Religious Studies 487 Seminar in Peace Studies (3)

Elective Courses (9 units)

Any nine units of upper division courses in Religious Studies.

It is highly recommended that students minoring in Religious Studies pursue the study of classical languages such as Latin, Greek, Hebrew, Arabic, and Sanskrit when such courses are offered.

# MINOR IN CHRISTIAN STUDIES

Students minoring in Christian Studies are required to take 21 units, distributed as follows: A LAND ROLL TO BE ADDITION OF THE PROPERTY OF T

# Required Courses (9 units)

Religious Studies 200 Introduction to Christianity (3) Religious Studies 345A History and Development of Christian Thought: The Beginning to 1274 (3) Religious Studies 345B History and Development of Christian Thought: 1275 to the Present (3)

#### Elective Courses (12 units)

At least six units must be taken in courses cross-listed with other departments.

Religious Studies 201 Origins of the New Testament (3)
Religious Studies 312 The Bible as Literature (3) Afro/Religious Studies 325 African-American Religion (3) Religious Studies 331T New Testament Studies (3) Religious Studies 335 Judaism, Christianity, and Islam Compared (3)

Religious Studies 343 Religion and Current Ethical Issues (3) Religious Studies 350T Major Christian Traditions (3) Religious Studies 358 Comparative Mysticism (3)

Geography/Religious Studies 366 Geography of Religion (3)

Religious Studies 376 Dimensions of Religious Experience (3) Religious Studies 380 The Religious Roots of

Nonviolence (3) Religious Studies 390 Religion, the Media, and

Contemporary Culture (3)

History/Religious Studies 417B Roman Empire (3) History/Religious Studies 420 The Byzantine Empire (3) History/Religious Studies 421A History of the Christian

Church to 1025 (3)

History/Religious Studies 421B History of the Christian Church from 1025 to the Present (3)

History/Religious Studies 425B. The Reformation (3) Religious Studies 428 Great Religious Peacemakers (3)

Sociology/Religious Studies 458 Sociology of Religious Behavior (3)

Religious Studies 481 Religion and Politics in the American Experience (3)

History/Religous Studies 483 American Religious History (3) Religious Studies 485T Major Religious Thinkers and Concepts (3)\*

Religious Studies 487 Seminar in Peace Studies (3)\* Religious Studies 499 Independent Study (3)\*

It is highly recommended that students minoring in Christian Studies pursue the study of classical languages such as Latin, Greek, and Hebrew when such courses are offered.

<sup>\*</sup>When the content pertains to the Christian tradition.

#### MINOR IN JEWISH STUDIES

Students minoring in Jewish Studies are required to take 21 units, distributed as follows:

# Required Courses (9 units)

Religious Studies 210 Introduction to Judaism (3) Religious Studies 346A History and Development of Jewish

Thought: Biblical Origins to Maimonides (3)

Religious Studies 346B History and Development of Jewish Thought: 1204 to the Present (3)

# Elective Courses (12 units)

At least six units must be taken in courses cross-listed with other departments.

Comp Lit/Religious Studies 312 The Bible as Literature (3) Religious Studies 330T Hebrew Scriptural Studies (3)

Religious Studies 335 Judaism, Christianity, and Islam Compared (3)

Religious Studies 343 Religion and Current Ethical Issues (3)

Religious Studies 358 Comparative Mysticism (3)

Geography/Religious Studies 366 Geography of Religion (3)

Religious Studies 376 Dimensions of Religious Experience (3) Religious Studies 380 The Religious Roots of

Nonviolence (3)

Religious Studies 390 Religion, the Media, and Contemporary Culture (3)

History/Religious Studies 405 History of the Jews (3)

History 415B Hellenistic Civilization (3)

Sociology/Religious Studies 458 Sociology of Religious Behavior (3)

History/Religious Studies 467 The Middle East in the 19th Century (3)

History 468 Middle East in the 20th Century (3)

Religious Studies 476 Understanding the Holocaust (3)

Religious Studies 481 Religion and Politics in the American Experience (3)

Religious Studies 485T Major Religious Thinkers and Concepts (3)\*

Religious Studies 487 Seminar in Peace Studies (3)\*

Religious Studies 499 Independent Study (1-3)\*

It is highly recommended that students minoring in Jewish Studies pursue the study of Hebrew when such a course is offered.

\*When the content pertains to the Jewish tradition.

# It is highly recommended that students minoring in Christia MINOR IN PEACE STUDIES

Greek, and Hebrew when such Students minoring in Peace Studies are required to take 21 units, distributed as follows: mean palared and or anismed means and medW

# Core Requirements (6 units)

Religious Studies 310 Introduction to Peace Studies (3) Religious Studies 487 Seminar in Peace Studies (3)\*\*

\*\*May be taken only after 12 units in Peace Studies have been completed.

# Required Courses (9 units)

American Studies 405 Images of Crime and Violence in American Culture (3)

History 407 War and Civilization (3)

Political Science 453 International Conflict, War and Peace (3) School of the Property of the School School of the School School of the School School of the School of t

Religious Studies 380 The Religious Roots of Nonviolence (3)

Religious Studies 428 Great Religious Peacemakers (3)

Sociology 385 Family Violence (3)

Speech Comm 220 Interpersonal Conflict Management (3)

# Elective Courses (6 units)

Courses must be selected from at least two of the departments included below:

Philosophy 310 Ethics (3)

Biology 330 Ecology of American Indians (3)

Afro 335 History of Regism (3)

Afro 335 History of Racism (3)

Religious Studies 343 Religion and Current Ethical Issues (3)

Psychology 351 Social Psychology (3)

American Studies 460 Cultural Radicalism in America (3)

Philosophy 365 Social Philosophy (3)

Sociology 372 Social Futures (3)

Management 441 Labor-Management Relations (3)

Chicano Studies 450 The Chicano and Contemporary Issues (3)

Poli Sci 456 The National Security Establishement (3)

Poli Sci 461 The United Nations and Other Public

International Organizations (3)

Poli Sci 491 International Internship (3)\* Any 499 Independent Study\*\* (1-3)

\*\*Directed by Instructor of students' choice.

# Religious Studies Courses

101 Fundamental Hebrew A (4) (Same as Hebrew 101)

102 Fundamental Hebrew B (4)

(Same as Hebrew 102)

#### 105 The Sacred Quest for Human Meaning (3)

Inquiry into the nature of religious experience as the human pursuit of meaning and transcendence, exploring its central themes, phenomena, and questions, its principal types of figures and communities, and its major categories of sacred rituals, objects, seasons, and places.

<sup>\*</sup>With coordinator's approval in view of actual content.

# 110 The World's Great Religions (3)

(Same as Philosophy 110)

# 150A Western Civilization to the 16th Century:

A Comparative Approach (3) (Same as History 150A)

#### 200 Introduction to Christianity (3)

The Christian scriptures and their background in the light of modern exegesis; the Synoptic Gospels, written creeds and liturgical formulae associated with the Orthodox, Roman and Protestant communions.

## 201 Origins of the New Testament (3)

The sources and content of the New Testament writings which reflect the life and beliefs of the Christians in the first century of the Common Era, including literary and historical criticism.

# 210 Introduction to Judaism (3)

The Jewish tradition — its scriptures, laws, customs, holidays and worldview in their historical setting.

# 246A Basic Hatha Yoga (2)

(Same as Physical Ed 246A)

# 246B Intermediate Hatha Yoga (2)

(Same as Physical Ed 246B)

#### 250 The Religion of Islam (3)

The religion of Islam, its background and main teachings: the rise of Islam, the caliphate, Islamic theology, teachings, mysticism and philosophy.

#### 270T Introduction to the Oriental Religions (3)

The main teachings of a major South Asian, Far Eastern, or 'Oriental' religion per semester. Such religions as Jainism, Hinduism, Taoism, Shintoism, and Zoroastrianism will be discussed. May be repeated for credit with different subject matter.

# 280 Introduction to Buddhism (3) (ALLA violate an amost)

Introduction into the origins and development of Buddhism. Included in the course will be a discussion of the major teachings found in all traditions of Buddhism, the three major traditions of Buddhism, and the position of Buddhism in the U.S.

## 300 Methodologies of Religious Studies (3)

Prerequisite: Religious Studies 110 or consent of instructor. Religious studies as an academic discipline; contributions from history, sociology, psychology, phenomenology and anthropology. Definition and function of religion, its varieties, its categories and the methodologies by which it is studied.

# gious traditions. Analysis of their concrete co(4)

(Same as Linguistics 301) Apiffnos do noisuloses analoly

#### 310 Introduction to Peace Studies (3)

A fundamental orientation towards the academic study of the peaceful resolution of conflict on the personal, inter-personal, and societal levels, with special attention to peacemaking as an ethical and religious value.

# 312 The Bible as Literature (3) (Same as Comp Lit 312)

# 325 African-American Religion (3)

(Same as Afro-Ethnic Studies 325)

#### 330T Hebrew Scriptural Studies (3)

Specific areas of Hebrew Scriptures such as major and minor prophets, Psalms, values of wisdom writers, books of the Old Testament. May be repeated for credit with different subject content. The said forms of the said and the said for the

#### 331T New Testament Studies (3)

Specific areas of the New Testament such as the Synoptic Gospels, The Pauline Corpus, The Johannine Corpus, etc. May be repeated for credit with different subject matter.

#### 335 Judaism, Christianity and Islam Compared (3)

A comparative study of the three great monotheistic traditions, Judaism, Christianity, and Islam; their beliefs, practices, and cleaned period in 1258. Interpretation of the Qur at surrounts of Hadub literature, development of blamic law, divisions with

#### 343 Religion and Current Ethical Issues (3)

An examination of contemporary ethical issues as they relate to the teachings of selected religious traditions on questions such as abortion, euthanasia, environmental pollution, global hunger, homelessness, pornography and censorship, racism, sexism, and emphasis on twentieth century developments. Em-sonaloiv

#### 345A History and Development of Christian Thought: The Beginning to 1274 (3)

Christian thought from apostolic times to the death of Thomas Aquinas; Old and New Rome, the Great Councils, the Middle Ages, and the marriage of faith and reason.

#### 345B History and Development of Christian Thought: 1275 to the Present (3)

Christian thought from the death of Thomas Aguinas to the present; the cultural and philosophical backgrounds of the successive ages of scholasticism, the Renaissance, Baroque, reason and revolution, and the modern world.

## 346A History and Development of Jewish Thought: Biblical Origins to Maimonides (3)

Jewish thought from biblical times to the death of Moses Maimonides (1204); Hebrew scriptures, Roman era, Talmud, and Spanish Jewry.

#### 346B History and Development of Jewish Thought: 1204 to the Present (3)

Iewish thought from the death of Maimonides to the present; expulsions and persecutions, mysticism, emancipation, modern anti-Semitism, and Zionism.

#### 347A History and Development of Hinduism to 1200 (3)

Prerequisite: Religious Studies 110 or 270Tor consent of instructor. Hindu thought from the Veda to 1200. Subjects will include the Upanisads, a survey of the orthodox ritual and legal traditions, the six major philosophical traditions, and the beginnings of sectarianism.

#### 347B History and Development of Hinduism from 1200 (3)

Prerequisite: Religious Studies 110 or 270Tor consent of instructor. Hindu thought from 1200 to the present. Subjects will include the sects and philosophers in the devotional tradition, nineteenth century reformationalism, religious reformers, and the contributions of the Theosophical Society and M.K. Gandhi.

#### 348 Philosophy of Religion (3) (Same as Philosophy 348)

#### 349A History and Development of Islamic Thought from Beginning to 1258 (3)

Prerequisite: Religious Studies 110 or 250 or equivalent. Islamic theology, law, culture, and spirituality up to the close of the classical period in 1258. Interpretation of the Qur'an, formation of Hadith literature, development of Islamic law, divisions within Islam, rise of mysticism, contributions to science and art.

#### 349B History and Development of Islamic Thought from 1259 to Modern Times (3)

Prerequisite: Religious Studies 110 or 250 or equivalent. Islamic thought from the close of the classical period to the present, with emphasis on twentieth century developments. Emergence of modern Middle East, reform movements, Islamic response to nationalism and modernity, recent Islamic resurgence.

# 350T Major Christian Traditions (3)

Catholicism, Protestantism, Eastern Christianity, or Post-Reformation Communities; historical development and self-understanding, liturgy, creeds, moral norms, canon laws and outstanding figures. May be repeated for credit with different content.

#### 358 Comparative Mysticism (3)

Prerequisite: Religious Studies 110 or equivalent. A comparative survey of mysticism as a recurring phenomenon within major religious traditions. Included are selected writings and representative male and female figures, analyzed from philosophical and psychological viewpoints. Definitions, terms, metaphors, techniques, and stages of the mystical experience.

# 366 Geography of Religion (3)

(Same as Geography 366)

#### 370 Modern Non-traditional Religious Movements in America (3)

Beliefs, history, ritual and organizational make-up of non-traditional modern religions in America, such as Scientology, the Unification Church, Hare Krishna (ISKCON) and Rajneeshism as presented by guest speakers. Discussion of "cult," "sect" and the occult will comprise portion of course.

# 376 Dimensions of Religious Experience (3)

The great themes of religious thought viewed objectively and subjectively in history and in the present day. Seminar and discussion presentation.

#### 380 The Religious Roots of Nonviolence (3)

Prerequisites: Religious Studies 110, 310 or consent of instructor. An investigation of the foundations of nonviolence as taught within the major religious traditions: Judaism, Christianity, Islam, Hinduism, and Buddhism.

#### 390 Religion, the Media, and Contemporary Culture (3)

Prerequisite: American Studies 201 or Communication 233 or History 180 or Religious Studies 110 or consent of instructor. Religion reporting in the secular media; the religious press in America; the influence of the media, both secular and religious, on the shaping of society's values; ethical dilemmas faced by reporters. Cultural Radicallam in America (

# 405 History of the Jews (3) (3048 bd lasiayd 22 ams?)

(Same as History 405)

#### 417B Roman Empire (3) between the latest and all to noticine and I (Same as History 417B) hands small subdethernous catalal lo

#### 419 Shamanism in Cross-Cultural Perspective (3) (Same as Anthropology 419)

420 The Byzantine Empire (3) (Same as History 420)

# 421A History of the Christian Church to 1025 (3)

(Same as History 421A) (E) mainlibration no propulous 1 085

#### 421B History of the Christian Church From 1025 to the Present (3)

(Same as History 421B) Manager and base metablished

# 425B The Reformation (3) Managed to seigolobodisM 008

(Same as History 425B)

## 428 Great Religious Peacemakers (3)

Prerequisites: Religious Studies 110, 310, or 345B, or consent of instructor. Biographies and writings of modern peacemakers whose vision has been inspired by moral teachings of their religious traditions. Analysis of their concrete contribution to nonviolent resolution of conflict.

#### 437 American Indian Religions and Philosophy (3) (Same as Afro-Ethnic Studies 437)

#### 458 Sociology of Religious Behavior (3) (Same as Sociology 458)

#### 465A History of India (3) (Same as History 465A)

#### 465B History of India (3) (Same as History 465B)

#### 466A Islamic Civilization: Arab Era (3) (Same as History 466A)

#### 466B Islamic Civilization: Imperial Age (3) (Same as History 466B)

#### 476 Understanding the Holocaust (3)

The ordeal of European Jewry; the beginnings and the end of an organized policy of genocide; impressions of eye witnesses; thoughts about the holocaust after a generation.

#### 481 Religion and Politics in the American Experience (3)

Prerequisites: Poli Sci 100. An examination of the relationship of politics and religion, especially in the U.S. The colonial and constitutional experience, Supreme Court decisions on religious issues, the principal theorists of moral discourse in the public forum. Contemporary issues of concern. (Same as Poli Sci 481)

#### 483 American Religious History (3) (Same as History 483)

#### 485T Major Religious Thinkers and Concepts (3)

Prerequisite: approval of undergraduate adviser. Religious thinkers and concepts dealing with Western, Eastern and non-traditional religious ideas from ancient to modern times. Fulfills university upper-division baccalaureate writing requirement. May be repeated with different content.

## 486 History and Methods of Religious Studies (3)

Prerequisite: Religious Studies 105, approval of undergraduate advisor. Advanced seminar in the history, basic issues, and classic and contemporary works of the discipline of Religious Studies.

#### 487 Seminar in Peace Studies: (3)

Prerequisite: 12 units of Peace Studies courses. Seminar in Peace Studies. Theoretical and practical approaches to personal, interpersonal and societal peacemaking. Integrates and builds upon previous classes in peace studies.

# 499 Independent Study (1-3)

Supervised research projects in religious studies to be taken with consent of instructor and the department chair. May be repeated The Russian and East European Area Studies program, tibers of

# Russian and East European Area Studies Program

Program Coordinator (Acting): Ron Helin (Geography) Program Office: McCarthy Hall 103

# Program Offered

Bachelor of Arts in Russian & East European Area Studies

#### Program Council

David Depew (Philosophy), Ronald Helin (Geography), Jane Hipolito (English), Karl Kahrs (Political Science), Robert Picard (Communications), Bruce Wright (Political Science)

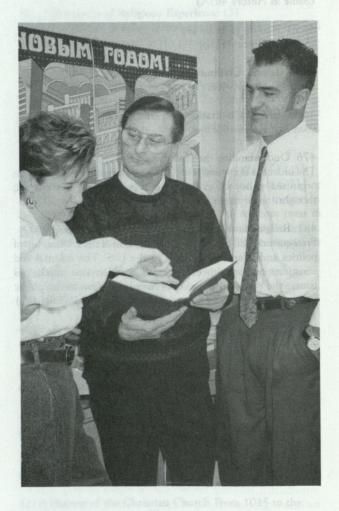
#### INTRODUCTION

The Russian and East European Area Studies program is an interdisciplinary program designed for students whose interests and career objectives are in government service, communication, international business or education. The program provides students already majoring in an existing discipline or department (i.e., history, business, biology, etc.) the opportunity to have a second major. In addition, the program fulfills the various cultural objectives common to any liberal arts program.

#### BACHELOR OF ARTS IN RUSSIAN AND EAST EUROPEAN AREA STUDIES

To qualify for this major, a student must complete (1) 20 units of Russian language or their equivalent, (2) 24 units of upper-division Russian area courses from at least four of the following fields: communications, comparative literature, economics, geography, philosophy, political science, history, foreign language, (3) 15 units of upper-division course work in a related discipline to be determined in consultation with a Russian area counselor. Students are encouraged to have these units apply toward a major in a traditional discipline.

The basic lower-division courses also may be used to meet general educational requirements.



# Russian and East European Area Studies Courses

All courses within the Russian and East European area studies program originate in other departments within the university. Students should refer to the department originating the course for description.

#### Communications

426 World Communication Systems (3)

#### Comparative Literature

373 Masters of Russian Literature (3)

374 Soviet Literature (3)

#### **Economics**

331 The Soviet Economy (3)

#### Foreign Languages

Russian 101 Fundamental Russian-A (5)

Russian 102 Fundamental Russian-B (5)

Russian 203 Intermediate Russian-A (5)

Russian 204 Intermediate Russian-B (5)

Geography
338 Russia and Its Environs (3)

#### History - the se COI Half varie Os Merchi Omeron !!

420 The Byzantine Empire (3)

434A Russia to 1890 (3)

434B Russian Revolution and the Soviet Regime (3)

Program Coordinator: Strank M. Bagrosh (Psychology)

437 East Europe (3)

490T Senior Research Seminar (3)

(When topic is Russian Revolution or Polish History)

#### Philosophy

382 Marx and Marxism (3)

430T Government & Politics (of the U.S.S.R.) (3)
431T Government & Politics (of Fost Fivern ) (2)

431T Government & Politics (of East Europe) (3)

443 Theory and Philosophy of Marxism (3)

452T Foreign Policy (of the U.S.S.R.) (3)

# Social Sciences Program and had been released.

Program Coordinator: Frank M. Bagrash (Psychology) Program Office: McCarthy Hall 103

Program Offered Master of Arts in Social Sciences

Adviser (When topic is Russian Revulucion or Palish His Frank M. Bagrash

#### Advisory Board

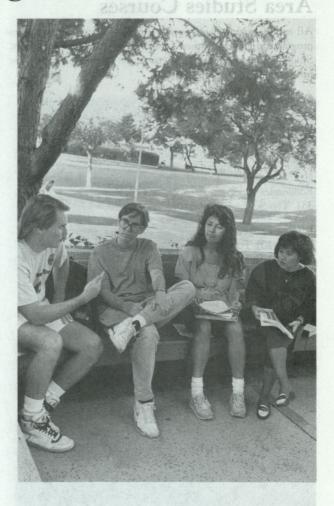
The Advisory Board consists of one faculty representative from each participating department or program, two student representatives, and the dean of graduate studies or a representative (exofficio). The participating departments are: Sociology, History, Geography, Afro-Ethnic Studies, Political Science, American Studies, Chicano Studies, Criminal Justice, Anthropology, Psychology, Philosophy and Economics.

# INTRODUCTION (3.8.8.U. sales) voited agreed Tick

Social Sciences is an interdisciplinary program providing for individualized programs of graduate study which emphasize the examination of human behavior and its relations to social institutions. These programs have the common purpose of exposing students to diverse methodologies, establishing the relationship between disciplines, and providing the student with the opportunity to explore a selected area from a variety of intellectual perspectives.

The social sciences include the following related fields: Afro-Ethnic studies, American studies, anthropology, Chicano studies, criminal justice, economics, geography, history, philosophy, political science, psychology and sociology.

This degree is designed to provide interdisciplinary insights and tools for those interested in (1) pursuing careers in government and business; (2) elementary, secondary, or community college teaching in the area of social studies or any of the social sciences; (3) a graduate program to complement the undergraduate degree in social science, liberal studies, or any single department major within the social sciences; or (4) a custom-tailored program of advanced study in the liberal arts.



#### ADMISSION TO THE PROGRAM

A student may be admitted to the program in conditionally classified graduate standing with a baccalaureate from an accredited institution and a minimum grade-point average of 2.5 in the last 60 semester units attempted. Classified standing requires an undergraduate major or its equivalent in one of the social sciences, a GPA of 3.0 in upper division social sciences courses, and substantial work in the social science fields selected for study.\* The graduate adviser will determine qualifications in these areas and may require 3-12 units of course work beyond the study plan to compensate for deficiencies. A study plan must be developed and approved for admission to classified graduate standing.

#### MASTER OF ARTS DEGREE IN SOCIAL SCIENCES

Of the 30 units of adviser-approved courses on the study plan, at least 18 must be in appropriate work at the 500-level. Courses in the multidisciplinary core are selected in consultation with the graduate program adviser and faculty in their areas of interest and should correspond to the focus in the thesis. Every student will prepare a thesis on a topic approved by the graduate program adviser and the student's committee. The thesis must reflect the student's interdisciplinary effort.

#### Social Sciences Core (6 units)

Social Sci 500 Social Science Theories (3) Social Sci 501 Social Science Methods (3)

#### Multidisciplinary Core (18-21 units)

Course work must be taken in at least two social science fields and include a minimum of nine 500-level units.

Thesis (3-6 units)
Social Sci 598 Thesis (3-6)

Competency in a foreign language or in specific techniques (e.g., film-making) may be required in addition to the study plan in cases where the student's committee and the graduate program adviser consider such competencies necessary for the particular focus. Such requirements will be stated no later than the time the student is advanced to classified standing.

This degree program relates to various career options in the social sciences. Work experience in these careers may be gained under an internship course in one of the social sciences, and the project may be tailored to a career option. For further information, consult the graduate program adviser.

# Social Sciences Courses

#### 500 Social Science Theories (3)

A philosophical and theoretical basis for graduate work in the areas of social science. The interrelationships among the various social sciences as they relate to social, physical and political environments.

#### 501 Social Science Methods (3)

Analytical comparison of the historical, humanistic and scientific methodologies in the social sciences. Contemporary trends in the social sciences methods.

#### 598 Thesis (3-6)

Individual direction by committee of faculty in research and preparation of a written research essay which will reflect an interdisciplinary program of study. It is seed loises been sport to

#### 599 Independent Graduate Research (3)

Open to graduate students in social science with the consent of program adviser or coordinator. May be repeated for credit.

<sup>\*</sup>The prerequisite for "substantial work" will vary among departments and according to the specific courses within some departments. Lack of substantial work in one or more fields will not ordinarily bar a student from admission but will result in one or more additional courses being required before the student may be classified.

# Department of Sociology

Department Chair: Ronald Elliott Hughes Department Office: Humanities 730M

Programs Offered
Bachelor of Arts in Sociology
Minor in Sociology
Master of Arts in Sociology

Emphasis in Gerontology
Emphasis in Applied Social Research

#### Faculty

Takenori Aso, John Bedell, Tony Bell, Dennis Berg, Jonathan Brower, Carol Copp, Helaine Feingold, Rosalie Gilford, Ronald Hughes, Hilla Israely, Perry Jacobson, Michael Mend, G. Nanjundappa, Rae Newton, Myron Orleans, Houshang Poorkaj, Lorraine Prinsky, Gerald Rosen, C. Michael Stuart, Clarence Tygart, Ernest Works, Troy Zimmer

#### Advisers

Undergraduate: Tony Bell and G. Nanjundappa Graduate: Rae Newton

#### INTRODUCTION

Sociology is the study of social life: the nature and structure of groups, institutions and societies. Sociology attempts to identify and understand the social functions and processes of human behavior. Sociology's subject matter ranges from the intimate family to the hostile mob, from crime to religion, from divisions of race and social class to the shared beliefs of a common culture, from the sociology of work to the sociology of sport, from the study of conformity to the study of deviance, from childhood to old age and death.

The sociology major is designed to provide undergraduate preparation leading to careers in social work, politics, law, public administration, urban and environmental planning, public relations, personnel, criminal justice, counseling and other service professions. The Bachelor of Arts in Sociology will also prepare a student for advanced studies in several areas including sociology, social welfare, environmental studies, education, public health and urban planning.



#### Field Experience

The major in sociology offers an internship to provide supervised field experience. This permits students to apply relevant sociological knowledge in practical settings. The course may earn from one to three units. An independent study is also offered for this purpose. It allows students to expand upon individual interests within the field of sociology. This study may be in the form of an individual research project, either library or field. Conferences are scheduled with the supervising faculty member as necessary to provide for maximum benefits. No more than nine units of any combination of internships and independent studies may be applied toward the thirty-six units required for the major. Senior seminars will be offered each semester on topics of current sociological relevance. The seminar is open to students of all disciplines with senior classification who have had upper-division course work in the area. The topics will vary from semester to semester depending upon the specialty and training of the instructor. This course may be repeated for credit.

NOTE: A maximum of six units only of internship may be applied toward the major. A maximum of nine units only of independent study may be applied toward the major. However, no more than nine units of a combination of internship (six units maximum) and independent study may be applied for credit toward the major.

#### CREDENTIAL INFORMATION

Requirements for sociology majors with a Multiple Subject Credential objective are available in the Sociology Department office.

#### BACHELOR OF ARTS IN SOCIOLOGY

Students majoring in sociology are required to complete a minimum of 36 units of course work in sociology. Included within the 36 units are 12 units of courses required of all majors and 24 units of adviser approved electives tailored to each student's career objectives. In addition to the minimum of 36 units, students must satisfy the 3 unit writing requirement listed below. At least 27 units must be upper division. A total of nine adviser-approved units may be transferred from a community college.

#### Required Courses (12 units)

Sociology	101	Introduction to Sociology (3)
Socialogy	301	Theories of Social Behavior (3)

Sociology 302 Social Research Methods (3)

Sociology 303 Statistics for the Social Sciences (3)

# Writing Requirement (3 units)

Sociology 308 Writing for Sociology Students (3)

English 301 Advanced College Writing (3)

English 360 Scientific & Technical Report Writing (3)

English 365 Legal Writing (3)

or an adviser-approved upper-division writing course.

#### Electives (24 units)

Students are to select a minimum of 24 units of elective course work in sociology consistent with their career objectives.

NOTE: All courses counting toward the major must be taken for a letter grade. Students under Fall 1991 and later catalogs must pass each required course and the writing requirement with a grade of "C"

#### MINOR IN SOCIOLOGY

#### Required Courses (9 units)

Sociology 101 Introduction to Sociology (3)

Sociology 301 Theories of Social Behavior (3)

Sociology 302 Social Research Methods (3)

#### Elective Courses (12 units):

Students select 12 units of upper-division course work in sociology.

#### MASTER OF ARTS IN SOCIOLOGY

The Sociology Department accepts graduate students in the fall and spring semesters of each academic year. The program for this degree provides advanced study in general sociology. It offers an opportunity to broaden one's knowledge of society, to strengthen skills of sociological analysis and to do research in depth in an area of particular interest. It may be used as preparation for study toward the doctorate in sociology, for community college teaching, participation in research or for a variety of positions in business and industry, corrections, the community or government.

The program is composed of a 15-unit core sequence which all students must complete and 15 units of electives to be chosen by the graduate student in consultation with the graduate adviser. It is designed to facilitate close contact between students and faculty, to encourage students to accept a role in the selection of course offerings, and to participate in all areas of departmental decision making.

#### Prerequisites

Students must meet the university requirements for admission to graduate standing. Please see the "Graduate Regulations" section of this catalog for policies and procedures on admission of graduate students.

In order to be accepted as a sociology graduate student, the applicant must have a grade-point average of 2.75 or better in the most recent 60 units of college work and a grade-point average of 3.0 (B) or better for all work in sociology. A minimum of 18 upper-division units in sociology is required, including the following courses or their equivalents:

Sociology 301 Theories of Social Behavior (3)

Social Research Methods (3) Sociology 302

Sociology 303 Statistics for the Social Sciences (3)

Courses in methods, statistics and theory must have been completed within the last five years prior to application. Two letters of reference attesting to the applicant's academic potential must be sent to the graduate coordinator. shubdivesia bris 1981/bb 190

Students will be accepted as conditionally classified sociology majors with either course or GPA deficiencies. Deficiencies must be corrected within one year of admission to the program.

Students will be classified upon the fulfillment of the above prerequisites, and after an approved study plan has been developed, in consultation with the Graduate Committee.

#### Study Plan

The study plan for the degree must be completed with a minimum grade-point average of 3.0 with no course grades below C. The study plan is approved by the student's adviser and includes the following: how serves more than to stimus I spoles and build

Core Course Sequence (12 units)

Sociology 501T Seminar: Topics in Societal Structure and Process (3)

Sociology 502A The Research Process (3)

Sociology 502B The Research Process (3)

Sociology 581 Advanced Theories of Social Behavior (3) (Sociology 502A and 581 are designed to be taken during the first semester of graduate studies.)

Electives (15 units)

Electives to be chosen from the following categories consistent with each student's goals, subject to approval by the graduate adviser and limited by the maximum number of units set for each category.

500-level graduate seminars (maximum 15 units)

400-level Sociology courses (maximum 6 units)

Sociology 596 Community College Symposium (3)

or Sociology 597 Project: Agency Placement (3)

(maximum 3 units)

Sociology 599 Independent Graduate Research (1-3) (maximum 6 units)

Thesis (3 units)

Sociology 598 Thesis (3)

For further information, consult the graduate program adviser.

#### EMPHASIS IN GERONTOLOGY

This emphasis within the M.A. in Sociology prepares students for careers as planners, policy makers, service providers, administrators, and researchers who work in business, industry, government offices and community programs with or on behalf of the elderly.

# Study Plan

The study plan for the degree must be approved by the Gerontology adviser and must include the following: Core Course Sequence (12 units)

Sociology 502A The Research Process (3)

Sociology 502B The Research Process (3)

Sociology 506 Theories of Aging (3)

Sociology 581 Advanced Theories of Social Behavior (3)

Gerontology Sequence (9 units)

Sociology 495T Senior Seminar (3)

Sociology 506 Theories of Aging (3)

Sociology 597 Project: Agency Placement (3)

Electives (6 units)

Adviser-approved 400- or 500-level courses in Sociology or related fields.

Sociology 598 Thesis (3 units)

Sociology 598 Thesis (A Gerontological Topic)

#### EMPHASIS IN APPLIED SOCIAL RESEARCH

This emphasis within the M.A. in Sociology prepares students for research analyst positions in business firms, government agencies, educational institutions and medical institutions.

#### Study Plan

The study plan for the degree must be approved by the Applied Research advisor and must include the following:

Core Course Sequence (12 units)

Sociology 501T Seminar: Topics in Societal Structure and Process (3)

The Research Process (3) Sociology 502A

Sociology 502B The Research Process (3)

Sociology 581 Advanced Theories of Social Behavior (3)

Applied Research Sequence (9 units)

Sociology 484 Using Computers in Sociology (3)

Sociology 501 Seminar: Evaluation and Applied Social

Research (3)

Sociology 597 Project: Agency Placement (3)

Electives (6 units)

Adviser-approved 400- or 500-level courses in Sociology or related fields.

Thesis (3 units)

Sociology 598 Thesis (An Applied Research Topic)

# Sociology Courses

#### 101 Introduction to Sociology (3)

The basic concepts of sociology: includes social interaction, culture, personality, social processes, population, social class, the community, social institutions and sociocultural change. (CAN SOC 2)

# 102 Social Problems (3)

The extent, causes and consequences of a number of social problems, 20th-century America: the changing society. (CAN SOC 4) requisite: Sociology 1((E) enobeled quest) without \$45

# 133 Introduction to Gerontology (3)

Multidisciplinary overview of the characteristics, strengths and problems of older persons; the development of gerontology as a solution to problems of aging; services to older adults; working with older persons in various settings; education for careers in gerontology.

#### 151 An Introduction to Family Relationships (3)

An introductory practical guide to family living. Topics include dating, courtship, children, financial problems, grandparents, in-laws, problems associated with careers of parents, effectively coping with family interactions.

#### 300 Introduction to Social Welfare (3)

Prerequisite: Sociology 101 or consent of instructor. The history, philosophy and development of thought in social welfare; the social work methods (casework, group work and community organization); social work as a career objective; social work practice; availability of employment and qualifications necessary.

#### 301 Theories of Social Behavior (3)

Prerequisite: Sociology 101 or consent of instructor. The main schools of sociological thought, both European and American. Systems of theory, methodology of theorists, cultural change and social institutions.

# 302 Social Research Methods (3)

Prerequisite: Sociology 101 or consent of instructor. Topics include: research design, methods of gathering data, the role of theory in research, sampling methods and problems, data processing and analysis.

## 303 Statistics for the Social Sciences (3)

Prerequisites: Sociology 101 and Mathematics 110 or equivalent or consent of instructor. The techniques for the elementary statistical analysis of social data.

#### 305 Techniques of Social Welfare (3)

Prerequisites: Sociology 101 and 300 or consent of instructor. Methods and theories underlying social work practice. History, values and philosophy of the profession. Methods and skills. Casework issues and trends in social work practice.

# 308 Writing for Sociology Students (3)

Prerequisite: Sociology 101 or consent of instructor. Composition, sources of information and sociological writing for different audiences. Satisfies the classroom portion of the upper-division writing requirement for sociology majors. Instructional fee.

#### 309 Computers in Sociology (3)

Prerequisite: Sociology 101 or consent of instructor. Introduction to computer applications in Sociology. Training in use of CSUF mainframe computers, software and microcomputers. Topics include: survey analysis with SPSS; constructing and editing data files and word processing.

#### 333 Sociology of Aging (3)

Prerequisite: Sociology 101 or consent of instructor. Analysis of population age structure; theories of aging; aging in family, economic, political, religious, educational, leisure/esthetic institutions. Aging and ethnicity. Social policy and the future of aging.

## 341 Social Interaction (3)

Prerequisite: Sociology 101 or consent of instructor. The social and sociopsychological dimensions of group behavior and the socialization of the individual. Social interaction and its impact on the individual and personality formation.

# 345 Sociology of Communication (3)

Prerequisite: Sociology 101 or consent of instructor. The social processes involved in communicating with symbols — verbal, visual and "body-language" - in interpersonal settings and the mass media.

#### 348 Collective Behavior (3)

Prerequisite: Sociology 101 or consent of instructor. Characteristics of crowds, mobs, publics. Analysis of social movements and revolutions, their relation to social unrest and their role in developing and changing social organization.

#### 350 Social Relationships and Emotions (3)

Prerequisite: Sociology 101 or consent of instructor. Consideration of social relationships emphasizing emotional bonds as the primary integrating force, including interactions between emotions and relationships.

#### 360 Human Ecology: Problems and Solutions (3)

Prerequisite: Sociology 101 or consent of instructor. Interaction between human populations and their environments in the context of functional interdependence involving population, environment, organization and technology. Examination of causes, consequences and solutions to modern day major environmental problems.

361 Population Problems (3) Health silder to gooloise A14 Prerequisite: Sociology 101 or consent of instructor. Population composition, growth and movement. Social factors affecting birth rates, death rates and migration. The population of the United States and selected areas of the world.

# 371 Urban Sociology (3)

Prerequisite: Sociology 101 or consent of instructor. The population and ecology, patterns of growth, institutions, characteristic social interaction, values and problems of the urban community.

#### 372 Social Futures (3)

Prerequisite: Sociology 101 or consent of instructor. The tools for projecting future probabilities and possibilities. The broad social and moral implications of scientific and technological advances. Procedures and consequences of social design.

#### 381 Sociology of Human Sexuality (3)

Prerequisite: Sociology 101 or consent of instructor. Study of the sociological aspects of human sexuality, socio-historical and comparative perspectives; relationships of sexual interaction to life cycle, gender, race, class and power.

#### 385 Family Violence (3)

Prerequisite: Sociology 101 or consent of instructor. For professions dealing with victims and/or perpetrators of family violence. Explores causes, intervention and prevention of all types of abuse: child, sibling, spouse and parent. Examines theories, research findings and practical field application.

#### 400 Sociological Internship (1-3)

Prerequisite: Sociology 101 or consent of instructor. Supervised field experience permitting application of relevant sociological material in practical settings.

#### 407 Women in Contemporary Society (3)

Prerequisite: Sociology 101 or consent of instructor. Women in American society. Sex role socialization, sexism in institutions, labor force participation, female health and sexuality.

#### 408 Sexual Abuse in American Society (3)

Prerequisites: Sociology 101, 466 or consent of instructor. Sociological examination of sexual victimization and their consequences. Patterns of forcible rape, sexual abuse of children, effects of sexual abuse on victims and abusers, and responses of various social groups to sexual victimization are presented.

# 411 Criminology (3) and an adjura and anomalia have

Prerequisite: Sociology 101 or consent of instructor. The extent, causes and control of criminal behavior. The criminal law, causal factors and theories, correctional institutions, probation and parole, and preventive efforts.

# 413 Juvenile Delinquency (3)

Prerequisite: Sociology 101 or consent of instructor. Juvenile delinquency as a social problem. Sociological study of the causes of delinquent behavior, and programs of control, treatment and prevention.

#### 414 Sociology of Public Health (3)

Prerequisite: Sociology 101 or consent of instructor. The social and organizational context of health care in the American community: social forces, processes and relationships which influence or determine the nature of health service.

#### 415 Sociology of Corrections (3)

Prerequisite: Sociology 101 or Sociology 411 or 413 or consent of instructor. Current problems and programs in probation, parole and correctional institutions. For students planning careers in corrections.

# 416 Sociology of Alcoholism (4)

Prerequisite: Sociology 101 or consent of instructor. Sociological analysis of alcoholism. The socio-emotional causes and consequences of this type of drug addiction. (3 hours seminar; 2 hours activity)

#### 431 Minority Group Relations (3)

Prerequisite: Sociology 101 or consent of instructor. Examines the development and current conditions of minority/majority relations through study of social, political and economic causes and consequences of prejudice and discrimination. Evolutionary and revolutionary movements for change will be studied.

#### 433 Aging and Social Services (3)

Prerequisite: Sociology 333 or consent of instructor. Sociological analysis of social problems of aging with special emphasis on strategies of intervention and barriers to service utilization. Critical examination of community service delivery systems. Review of career opportunities and qualifications required.

#### 436 Social Stratification (3)

Prerequisite: Sociology 101 or consent of instructor. Social class structures and their functions. Styles of life; determinants of class status; vertical social mobility; change in class systems.

# 446 Aging and Sexuality (3)

Prerequisite: Sociology 101 or consent of instructor, Impact of bio-psycho-social dynamics of aging on sexuality and affectual dimensions of marriage in later years; explicit forms and process of sexual expression in old age; singlehood, widowhood, homosexuality; sexuality in institutionalized elderly.

#### 450 Sociology of Sex Roles (3)

Prerequisite: Sociology 101 or consent of instructor. The effect of traditional and nontraditional sexual stereotypes on attitudes and behavior within the family, the educational system, the economic system and the legal system.

# 451 Sociology of the Family (3)

Prerequisite: Sociology 101 or consent of instructor. The family as a social institution. Historical and cross-cultural perspectives; social change affecting marriage and the family; analysis of American courtship and marriage patterns; the psychodynamics of family life.

# 452 The Sociology of Education (3) losson lo estylens lessons

Prerequisite: Sociology 101 or consent of instructor. Education as a social process and a social institution. The relationship between education as a social process and a social institution, between education and sociology, the social functions of education. The socialization process, the school and the community, and the school as a social institution.

#### 453 Child in American Society (3)

Prerequisite: Sociology 101 or consent of instructor. The child's role in America peer group participation, sibling rivalry and sibling order. The societal attitudes toward the child's place in society.

#### 455 Medical Sociology (3)

Prerequisite: Sociology 101 or consent of instructor and upper division standing. A sociological perspective for interpreting medicine and medical behavior.

#### 458 Sociology of Religious Behavior (3)

Prerequisite: Sociology 101 or consent of instructor. Religious behavior examined by social science theories. Religious rituals/ beliefs to cope with anxiety and powerlessness before natural forces and social structures and processes. Religion's contributions to individual identity, societal order and change. (Same as Religious Studies 458)

#### 459 The Sociology of Marital Dissolution (3)

Prerequisite: Sociology 101 or consent of instructor. The socialpsychological causes and consequences of voluntary marital dissolution (separation, divorce). Topics include: the erosion of attachment, personal identity changes, changing and new relationships with others, starting over, dating again, sexuality changes, loneliness, anxieties.

#### 460 Sociology of Death and Dying (3)

Prerequisite: Sociology 101 or consent of instructor. Dying as a social process; functions of bereavement behavior; the grief process; fear of death and dying; death related rituals, demographic aspects of mortality; American death acceptance-denial controversy.

#### 465 Law and Society (3)

Prerequisite: Sociology 101 or consent of instructor. The law and lawyers in the context of human society. Sociological analysis of the law and society; law as formal social control, social change, legal profession.

#### 466 Deviant Behavior (3)

Prerequisite: Sociology 101 or consent of instructor. Topics include; drug addiction, sexual deviance, delinquency, alcoholism, mental illness and life style.

#### 467 Sociology of Sport (3)

Prerequisite: Sociology 101 or consent of instructor. The nature, position, functions and growing importance of sport in contemporary industrial society. The relationship between structure, variety and extent of sport activity and other institutional sectors in society.

#### 477 Social Behavior (3)

Prerequisite: Sociology 101 or consent of instructor. The basic structures of various levels of social groups will be studied. The common and unique qualities of friendship, families, voluntary associations, complex organizations, communities and societies will be compared.

# 484 Using Computers in Sociology (3)

Prerequisites: Sociology 101, 302, 303, or consent of instructor. "Canned" statistical programs in data analysis. Research design and data preparation relevant to computer analysis. Instructional fee.

#### 495T Senior Seminar (3)

Prerequisite: Sociology 101 senior classification. Open to students who have had the upper division coursework in the area of the seminar. The seminar will depend upon the specialty and training of instructor. May be repeated for credit. Consult current class schedule for topics.

## 499 Independent Study (1-3)

Prerequisites: Sociology 101, at least 12 units of sociology and consent of instructor. An individual research project, either library or field. The student must enroll with an instructor whose recognized interests are in the area of the planned independent study. Conferences with the instructor as necessary and the work culminated in one or more papers. May be repeated for credit.

## 501T Seminar: Topics in Societal Structure and Process (3)

Prerequisite: consent of instructor. Analysis of a specialization within the study of society such as: socialization and personality; deviance; social change; institutional structure and process. May be repeated for credit.

#### 502A The Research Process (3)

Requires the completion of a research project including such elements as theory construction, hypotheses formation, sampling, survey construction, data collection and data analysis. Instructional fee.

#### 502B The Research Process (3)

Prerequisite: Sociology 502A. Problems of social research. Causal inferences, value bias and measurement, the construction of scales. Instructional fee.

#### 506 Theories of Aging (3)

Prerequisite: consent of instructor. Analysis of contemporary theories of adult development and aging and their application to solving social and scientific problems of an aging population.

#### 581 Advanced Theories of Social Behavior (3)

Prerequisite: Sociology 301 or equivalent or consent of instructor. The basic elements and key problems in constructing and evaluating sociological theories.

#### 596 Community College Symposium (3-6)

Prerequisite: consent of adviser. Introductory sociology, social problems and marriage and the family; teaching preparation. Includes an oral exam.

#### 597 Project: Agency Placement (3-6)

Prerequisite: consent of adviser. Twenty hours per week for one semester or 10 hours per week for two semesters. Choice limited by the availability of positions which meet the level of supervision and training for which credit may be given. Includes an oral exam conducted by a master's committee.

# 598 Thesis (3)

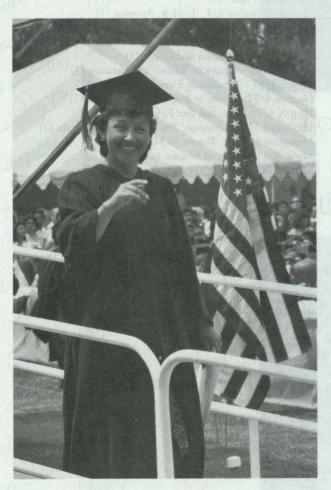
Prerequisites: acceptance as a candidate for the Master of Arts in Sociology, and approval of the topic. Individual research under supervision, reported in a thesis, and defended successfully in an oral examination conducted by a faculty committee.

## 599 Independent Graduate Research (1-3)

Prerequisite: consent of graduate adviser and instructor. Individual research on either a library or empirical project, with conferences with the instructor as necessary, culminating in one or more papers. May be repeated for credit.

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# Women's Studies Program



Program Coordinator: Diane Ross (Physical Education)

Program Office: McCarthy Hall 103

Program Offered Minor in Women's Studies

#### Faculty

Tony Bell (Sociology), Michael Birnbaum (Psychology), Bert Buzan (Political Science), Soraya Coley (Human Services), Carol Copp (Sociology), Angela Della Volpe (Linguistics), Wacira Gethiaga (Afro-Ethnic Studies), Rosalie Gilford (Sociology), Kenneth Goodhue-McWilliams (Biological Science), Rehema Gray (Afro-Ethnic Studies), Joan Greenwood (English), Hilla Israely (Sociology), Carl Jackson (Afro-Ethnic Studies), Helen Jaskoski (English), Judith Kandel (Biology), Karen Lystra (American Studies), Linda McKeever (Nursing), G. Nanjundappa (Sociology), David Pivar (History), Jill Rosenbaum (Criminal Justice), Diane Ross (HPER), Terri Snyder (American Studies), Sandra Sutphen (Political Science), Marjorie Tussing (Foreign Languages), Richard Wiseman (Speech Communication), Jerome Wright (Human Services)

#### INTRODUCTION

The minor in women's studies is designed for students (both women and men) who have a particular interest in learning more about the roles and status of women in society. Cross-disciplinary in structure, the minor draws from a wide variety of courses offered by many departments throughout the university. The goals of the minor are to apply concepts learned in women's studies courses to other academic areas, to encourage more students to do research in the area, and to prepare students in selected career paths where sensitivity to women's issues is important (particularly, business, education, counseling, human services, public administration and the health professions, as well as liberal arts degrees in general).

#### Student Services

The Women's Studies Student Association is an active and involved group which presents speakers, participates in colloquia, distributes an informative and entertaining newsletter, and serves to coordinate social and instructionally-related programs among students interested in the women's studies program and women's issues.

The Women's Studies Program maintains a close relationship with the Women's Center (located in the basement of McCarthy Hall), where students congregate to read announcements, share information and attend meetings. The Women's Center maintains a library of journals and texts used in women's studies courses and serves as the headquarters for the Women's Studies Student Association.

#### MINOR IN WOMEN'S STUDIES

The minor consists of 23 units, selected from the following categories:

#### Core Courses (5 units)

Philosophy 302 Introduction to Women's Studies (3) Biology 360 Biology of Human Sexuality (2)

#### Breadth Courses (9 units)

Courses should be selected from among the following in disciplines other than one's major. Courses in the major may not be used for credit toward the minor's breadth requirement.

Anthro 432 Women in Cross-Cultural Perspective (3) History 270 Women in American History (3) Philosophy 343 Philosophy of Feminism (3) Poli Sci 485 Women and Politics (3) Psychology 310 Psychology of Women (3) Sociology 450 Sociology of Sex Roles (3)

#### Elective Courses (9 units)

Selected from among the following, or with the consent of the program coordinator. Courses listed under "Breadth Courses" which are not used to fulfill the breadth requirements may also be used to fulfill the elective requirements.

Afro 310 Black Women in America (3) Afro 311/Huser 311 Intracultural Socialization Patterns (3) American Studies 413 The Shifting Role and Image of the American Male (3)

American Studies 419 Love in America (3)

American Studies 450 Women in American Society (3)

Chicano 406 La Chicana (3)

Crim Just 430 Women and Crime (3)

English 355T Images of Women in Literature (3)

French 485T Seminar in French Literature (3)\*

German 485T Seminar in German Literature (3)\*

History 477 American Sex Reformers (3)

Linguistics 369 Language, Sex Roles, and the Brain (3)

Management 431 Women In Management (3)

Music 305 History of Women in Music (3)

Nursing 303 Women's Health and Healing (3)

Poli Sci 474 Seminar in Constitutional Law: Civil Rights and Civil Liberties (3)

Psychology 312 The Psychology of Human Sexual Behavior (3)

Sociology 407 Women in Contemporary Society (3)

Sociology 408 Sexual Abuse in American Society (3)

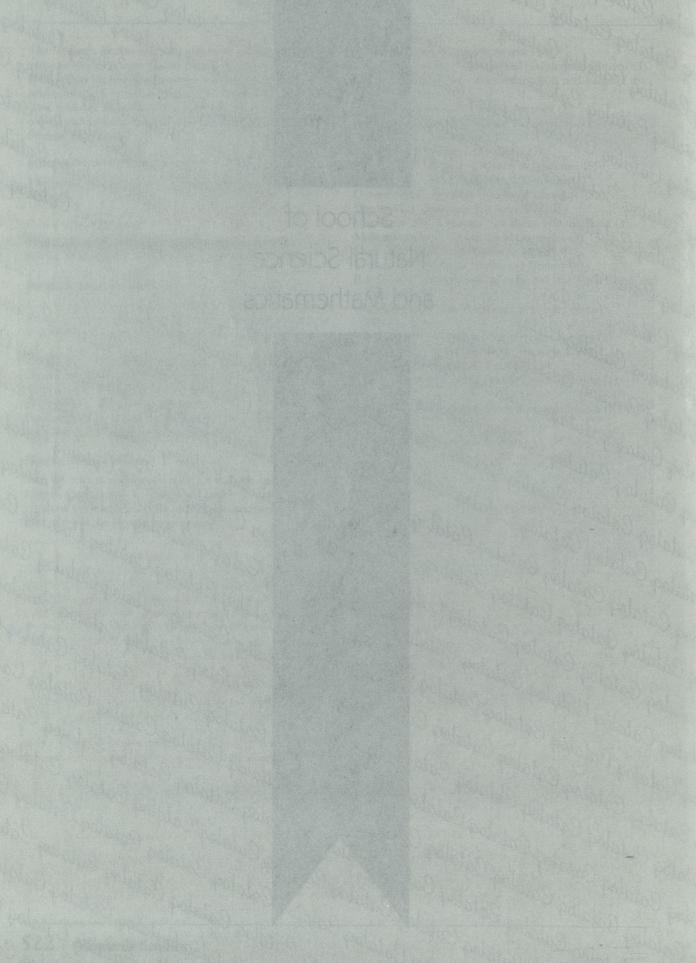
Sociology 446 Aging and Sexuality (3)

Speech Comm 315 Male Female Communication (1)

Independent Studies, offered in various departments (1,2 or 3)

<sup>\*</sup>When course topic focuses upon women.

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# School of Natural Science and Mathematics



Dean: Kolf O. Jayaweera

Associate Dean: Marvin J. Rosenberg
Assistant Dean: Sherry Bene-Stevens

Programs Offered and an application and an application of the standard of the

Biological Sciences (B.A.)

Biology (M.A.)

Biochemistry (B.S.)

Biotechnology (Minor)

Chemistry (B.A., B.S., Minor, M.S.)

Geology (B.S., Minor)

Mathematics (B.A., Minor, M.A.)

Physics (B.S., Minor)

Science (M.A.T.)

Teaching Credential

Single Subject Waiver Program in Life Science Single Subject Waiver Program in Physical Science

Single Subject Waiver Program in Mathematics

The curricula of the School of Natural Science and Mathematics are designed to prepare students for careers in scientific and other technical fields, for further study and specialization in advanced graduate work, and for entry into professional schools of medicine and other health-related disciplines. The faculty of the school is actively involved not only in instruction and scholarship but also in the advisement of students in the school on topics relating to the planning of career and program goals. Cooperative education internship programs are available in each of the school's departments.

The school sponsors a variety of professional and educational programs at which students and faculty have an opportunity to meet with their counterparts.

Recommended Preparation: For a career in mathematics or science a sound foundation is essential. High school preparation should include:

- · at least three, preferably four, years mathematics
- · chemistry and/or physics, preferably both
- · two or three years of foreign language.

Community college preparation should include at the minimum:

- · college writing
- · calculus
- · college chemistry
- first course in the major.

Qualifying Examinations: Enrollment in introductory courses is restricted to those who are adequately prepared, as shown by performance on qualifying examinations. In addition, the Entry Level Mathematics (ELM) examination is required of all students unless exempt.

#### Undergraduate Student Advisement

Undergraduate students should call the department office of their major to arrange for advising and approval of their study plan. University policy requires students to see an adviser each of their first two semesters and every year thereafter. Most departments prefer to advise their majors more frequently.

Students interested in programs in the school, but without a declared major should call the Office of the Dean for advisement.

#### Advisement for Health Professions

It is important for any student interested in pre-medical and allied fields to seek advisement at the Health Professions Office prior to registering for the first semester.

#### Graduate Student Advisement

Graduate students should consult the graduate adviser in their major department before registering for the first semester. No more than nine units may be completed before an approved study plan is filed.

#### Scholarships and Awards

The Miles McCarthy Health Professions Award is made annually to the outstanding graduate from the program for the health professions. The Diefenderfer Award is made annually to an outstanding woman or minority student. Other scholarships are available for majors in the School. Consult the university scholarship bulletin for details.

#### Recommended Program in General Education

Majors in the School of Natural Science and Mathematics should take mathematics and other courses in related fields early. General education courses normally should be scheduled throughout the study sequence.

Because of high unit requirements for the Bachelor of Science in Chemistry, this program has modified requirements for general education. Students should consult the department for particulars.



# Department of Biological Science

Department Chair: C. Eugene Jones Director, Graduate Program: Michael Horn Department Office: McCarthy Hall 282

Programs Offered Bachelor of Arts in Biological Science Minor in Biotechnology Master of Arts in Biology

Waiver Program for Single Subject Teaching Credential in Life Science (Ryan)

#### Faculty

Bayard Brattstrom, Jack Burk, Kathryn A. Dickson, David Drath, David Fromson, David Gill, Kenneth Goodhue-McWilliams, Kristine Hartney, Michael Horn, C. Eugene Jones, Judy Kandel, Robert Koch, Charles Lambert, Rodrigo Lois, Lon McClanahan, Steven Murray, Joyce Ono, William Presch, Marvin Rosenberg, Roger Seapy, James Smith, Donald Sutton, Barry Thomas, David Walkington, Joel Weintraub, Calvin Young

#### INTRODUCTION

Biology is the study of life, its basis and processes. The discipline is dynamic and expanding rapidly. In one direction, the study of molecular origins is the basis for understanding how cells are constructed and how they function including their metabolism, growth, development and reproduction. In another direction, the study of organisms is the basis for the understanding of how populations of organisms interact among themselves and with their environment. This includes a consideration of the distribution and abundance of organisms, energy flow among organisms and the cycling of inorganic and organic resources.

The major in biological science is designed for students who (1) desire to enter graduate and professional schools; (2) wish to prepare for secondary school teaching; or (3) seek careers in industry and state or federal agencies. The purposes of these students can best be served by building their curricula on a core of courses fundamental to the science of biology.

The curriculum beyond the basic core experience can best be satisfied through individual advising rather than through prescribed programs. Students will be assigned a faculty adviser when they enter the University. Students are required to meet with their designated adviser, at least once a year, in order to develop an appropriate program of study. The Department of Biological Science has established curricula in subdisciplines of biology which include: botany, cell and molecular biology, ecology, genetics, marine biology, medical biology, microbiology and zoology. After discussion with their advisers, students will elect those upper-division courses which will satisfy their individual interests and professional goals.

#### Special Programs

In addition to the usual course offerings, the Department of Biological Science participates in the Institute for Molecular Biology and two consortial programs with other California State University campuses. These are the Ocean Studies Institute and the California Desert Studies Consortium at Soda Springs, which are described in this catalog under "Institutes/Study Centers."

#### Preprofessional Information

The Health Professions Office provides advising services to students wishing to enter the health professions. The services include counseling students to plan their academic programs, providing students with the opportunity to volunteer for work opportunities in the area of their interest, and providing assistance in the preparation of applications, including interviewing techniques.

#### Credential Information

To qualify for a waiver from the examination for a Single Subject Credential in Life Science, the following courses must be included among, or in addition to, the requirements for the B.A. in Biological Science: Biology 320L. One of: Biology 362, 468, or 444. One of: Biology 419 and 419L, 446, 461, or 475.

#### Jerome Wilson Scholarship

To preserve the memory of Dr. Jerome Wilson, two scholarships per year are awarded to deserving undergraduate or graduate students of biology.

#### Recommended Program in General Education

Because of high unit requirements for the B.A. in Biological Science, students are urged to consult with their adviser to design their general education program.

#### Upper-Division Baccalaureate Writing Requirement

In addition to passing the English Writing Proficiency exam, students must pass English 301 Advanced College Writing or English 360 Scientific and Technical Report Writing with a grade of C or better.

#### Internships

Biology 495 Biological Internship provides students with the opportunity to participate in a practical work experience which integrates their interests with classroom studies.

#### BACHELOR OF ARTS IN BIOLOGICAL SCIENCE

A total of 124 units, including general education, 43 units in biology courses (27 units in the core and 16 units of upper-division electives), the upper-division writing requirement and supporting courses in physical sciences and mathematics are required for completion of the B.A. in Biological Science. The supporting courses must include one year of general college chemistry including qualitative analysis with laboratory, one year of organic chemistry with laboratory, one semester of college calculus, and one year of college physics with laboratory, a total of 30 units. Those students seeking careers in medicine should take a year of calculus, quantitative chemistry and laboratory, biochemistry and laboratory. Those students who wish to earn a doctoral degree should consider, in addition, a modern foreign language or advanced courses in computational sciences.

To qualify for a baccalaureate degree in biological science, students must have a 2.0 overall average in all required supporting courses. No credit toward the major will be allowed for biology courses in which a grade of D or F is obtained. Courses taken under the Credit/No Credit grade option may not be applied towards the major.

Upper-division students will be permitted to enroll in Biology 480 Advanced Topics in Biology, Biology 495 Biological Internship, and Biology 499L Independent Laboratory Study, for a total of three units. All full-time upper-division students are expected to attend the departmental seminars.

#### Core Requirements for the Major

131	Principles of Biology	3
241	Principles of Botany	4
261	Principles of Zoology	4
	General Microbiology	
312	Genetics and Molecular Biology	3
315	Cell and Developmental Biology	3
316	Principles of Ecology	4
	Cell and Molecular Laboratory	
	Total	7

Students must complete Biology 131, 241, and 261 before they take any other biology courses.

## Supporting Course Requirements for the Major Chem 120A, B General Chemistry ..... Chem 301A, B Organic Chemistry ...... 6 Chem 302 Organic Chem Lab ...... 2 Physics 211B, BL Elementary Physics ..... 4 Math 130 A Short Course in Calculus or Math 150A Analytic Geometry and Calculus . 4 Total ......30

#### MINOR IN BIOTECHNOLOGY

The biotechnology minor is appropriate for students majoring in biological science or biochemistry and interested in gaining employment in nearly any area of the growing medical and agricultural biotechnology industries, working in academic research laboratories, or pursuing postgraduate degrees in basic molecular biology or biochemistry.

The biotechnology minor requires a minimum of 31 acceptable units of chemistry and biology as shown below. These courses must be completed with an overall grade-point average of 2.0 and include 12 units unique to the minor and not used to meet requirements for the biological science or chemistry major.

#### Required Core Courses

Biol 131 Principles of Biology
Biol 312 Genetics and Molecular Biology 3
Chem 301A,B Organic Chemistry (3,3) 6
Biol 320L Cell and Molecular Biology Lab
or Chem 422A Biochemistry Laboratory 2
Biol 412 Principles of Gene Manipulation 3
Biol/Chem 472A,B Advances in Biotechnology
Lab (3,3),
Chem/Biol 477 Advances in Biotechnology 3
Total Core

#### Supporting Courses

Students must complete one of the following courses:

Biol 413	Advances in Molecular Genetics 3
Biol 424	Immunology 4
	A or 423A Biochemistry (1st semester) 3
Chem 421	B or 423B Biochemistry (2nd semester) 3
Tota	l Supporting

#### MASTER OF ARTS IN BIOLOGY

The program is based on the assumption that modern science necessitates broad preparation through the master's level of training. In design, it offers sufficient breadth and depth to strengthen the student's academic understanding and improve competence for (a) advanced graduate work toward the doctoral degree in biology, (b) teaching at all levels — elementary, secondary and community college, (c) participating in research programs, (d)

participating in various field service and conservation positions with both the state and national governments, (e) entering the field of public health service, or (f) technological work in the health sciences.

#### Admission Requirements

An applicant must meet the university requirements for admission, which include a baccalaureate from an accredited institution, and a grade-point average of at least 2.5 in the last 60 semester units attempted (see section of this catalog on Graduate Admissions for complete statement and procedures). In addition to the university requirements for admission, acceptance into this program is contingent upon the following: (1) a B.A. in Biological Science or related area at Cal State Fullerton or other accredited institution with a grade-point average of 3.0 in biology courses and a GPA of 2.5 in the related courses in mathematics, chemistry and physics; (2) acceptance by a thesis adviser; and (3) satisfactory scores on one of the following: (a) Graduate Record Examination Aptitude Test and the Advanced Test in Biology; (b) Medical College Admission Test; (c) Dental Admission Test; (4) completion of departmental application; and (5) submission of two letters of recommendation.

Students must meet the Graduate Level Writing Requirement which can be found in this catalog under "Graduate Regulations." Students will meet this requirement by taking Biology 500A,B Professional Aspects of Biology.

Students with limited subject or grade deficiencies may be considered for conditional acceptance to the program. Conditionally classified graduate standing may be removed upon completion of nine units of adviser and graduate committee approved postgraduate studies in biology, mathematics, chemistry or physics, with grades of B or better.

#### Classified Standing

Students should achieve classified graduate standing as soon as they are eligible, since no more than nine units of graduate work taken before classification can be included on the study plan (see below) for the degree. A student who meets the admission requirements may apply for classified standing, which requires the development of a study plan approved by the adviser, thesis committee, director of the departmental graduate program and dean of graduate studies.

#### Advancement to Candidacy

Advancement to candidacy is attained by requesting a graduation check and receiving subsequent approval of the graduate program adviser on Form B, mailed by the Graduate Studies Office.

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A study plan includes a minimum of 30 units of adviser-approved graduate work; at least one-half of the total units must be at the 500-level. All study plans must include Biology 599 Independent Graduate Research, Biology 500A, B Professional Aspects of Biology, and Biology 598 Thesis, and at least one departmental seminar. Six units must be outside the principal area. Required is a thesis acceptable to the adviser and committee, covering a research problem. A final oral examination on the student's research is also required.

Supervising the work of graduate students requires the personal attention of advisers. To insure that advisers are available for new graduate students a graduate student is expected to complete the requirements for graduation within three years after classifica-Adough the town to state of the month of the contract of the c

Students who are graduate assistants should complete the classification step either prior to appointment or during their first semester of appointment. They must become classified before being reappointed.

For more detailed information or advisement, students should contact the Biological Science Department, or the Graduate Program Director of the Biological Science Department.

# **Biological Science Courses**

Unless otherwise designated, prerequisites may be waived by the instructor of the course if the instructor is satisfied that the student is qualified to undertake the course.

#### 101 Elements of Biology (3)

Underlying principles governing life forms, processes and interactions. Elements of biology and reasoning skills for understanding scientific issues on personal, societal, and global levels. For the non-science major. No credit toward biological science major. (3 hours lecture)

# 101H Elements of Biology (Honors) (3)

Corequisite: Biology 101LH (Honors) must be taken concurrently with this course. Students must meet honors qualifications. Living organisms and characteristics of the natural environment. Emphasis on the scientific reasoning leading to our current understanding of living systems. (3 hours lecture)

# 101L Elements of Biology Laboratory (1)

Prerequisite or corequisite: Biology 101. Laboratory experiments demonstrating the principles presented in the lecture course. Scientific inquiry, cell structure and function, physiology, genetics, biodiversity, evolution and ecology. For the non-science major. (3 hours laboratory or fieldwork; weekend field trips may be required). Instructional fee.

#### 101LH Elements of Biology Laboratory (Honors) (1)

Corequisite: Biology 101H (Honors) must be taken concurrently with this course. Students must meet honors qualifications. Laboratory experiments and demonstrations which provide insight to scientific reasoning and the basis of our current understanding of living systems. (3 hours laboratory or fieldwork; field trips may be required)

#### 131 Principles of Biology (3)

Fundamental concepts and principles of biology: Nature of chemical bonds, biological molecules, cell structure and function, metabolism, photosynthesis, mitosis and meiosis, transmission genetics, gene structure and function, development, ecological interactions and associations, evolution. For science majors only. (3 hours lecture)

#### 241 Principles of Botany (4)

Prerequisite: Biology 131 or equivalent. The plant kingdom. The dynamic nature of plants as revealed by their structure, function, classification, phylogeny, physiology and ecology. (2 hours lecture; 6 hours laboratory or fieldwork; weekend field trips may be required). Instructional fee. (CAN BIOL 6)

#### 261 Principles of Zoology (4)

Prerequisite: Biology 131 or equivalent. The animal kingdom. The dynamic nature of representative invertebrate and vertebrate organisms; their structure, function, phylogeny, classification, physiology, behavior, ecology and solutions. (2 hours lecture: 6 hours laboratory or fieldwork; weekend field trips may be reguired). Instructional fee. (CAN BIOL 4)

#### 299L Directed Laboratory Study (1-2)

Prerequisites: Biology 131 and consent of instructor. Research in biology under the supervision of a biology faculty member. Intended for students (especially lower division) who may not have completed sufficient course work to allow them to work independently, but who are eager for laboratory research experience. May be repeated for university credit, but units do not count toward major. (3 hours laboratory per unit)

#### 300 Environmental Biology (3)

Prerequisite: Biology 101 or equivalent. Biological consequences of human intervention in ecosystems: Endangered and threatened species, pollution impact on organisms, pest control, population dynamics, genetic engineering of agricultural species, management of natural areas and urban ecosystem dynamics. No credit toward Biological Science major. (3 hours lecture)

#### 302 General Microbiology (4) MA ALERA TO METERA M

Prerequisites: Completion of lower division biology core courses and one year of college chemistry. Introduction to structure and function of bacteria and viruses including beneficial and detrimental activities and interactions with other organisms. Laboratory provides experience with microscopic, cultural, physiological and genetic study of microbes. (2 hours lecture; 6 hours laboratory). Instructional fee. (1) applies plantages

# 305 Human Heredity and Development (3)

Prerequisite: Biology 101 or equivalent. Principles of human heredity and embryology relating to human development. Mendelian genetics, single gene effects, genetics, prenatal diagnosis, and human embryology. No credit toward biological science major. (3 hours lecture)

#### 306 Biology of Aging (3)

Prerequisite: Biology 101 or equivalent. Biological changes in cells, tissues, organs and the whole body associated with aging. Theories of aging will be discussed with primary emphasis on mammals. No credit toward biological science major. (3 hours lecture)

#### 307 Computer Applications in Biology (3)

Prerequisites: Biology 241 and 261. Introduces biology students to the efficient use and application of computers in data organization, management and assimilation with respect to the natural and health sciences. (1 hour lecture and 6 hours laboratory)

#### 308 Biological Illustration (3)

Prerequisite: Biology 101 or equivalent. Line illustration and lettering used in preparation of biological drawings, charts and graphs for scientific publication. (1 hour lecture, 6 hours laboratory) (a) smalldare legisloloid at apitaites to not exilige bas, nois

#### 310 Human Physiology (3)

Prerequisite: Biology 101 or equivalent. Human physiological systems and their relationship to human function for non-biology majors and students in physical education and health sciences. No credit for biological science major. (3 hours lecture)

#### 311 Nutrition and Disease (3)

(Same as Chemistry 311)

#### 312 Genetics and Molecular Biology (3)

Prerequisite: Biology 302 or equivalent. Prerequisite or Corequisite: Chem 301A. Required of all Biology Majors. The general principles and molecular developments in the study of heredity. The course is comprehensive and includes transmission genetics, cytogenetics, elements of eukaryotic, bacterial, fungal, and viral genetics, DNA structure and function, gene expression and protein synthesis, recombinant DNA. (3 hours lecture)

#### 315 Cell and Developmental Biology (3)

Prerequisites: Biology 302 and Chemistry 301A or equivalents. Cell structure and function including an analysis of subcellular organelles and systems. An understanding of how research elucidates structure and function of cells. Study of cellular mechanisms operative during embryogenesis. (3 hours lecture)

#### 316 Principles of Ecology (4)

Prerequisite: Biology 241 and 261. Introduction to physiological, population, community and ecosystem ecology. (3 hours lecture, 2 hours activity; weekend field trips may be required.)

# 318 Wildlife Conservation (3)

Prerequisite: Biology 101 or equivalent. Causes and consequences of extinctions of plant and animal species. Endangered species, threatened ecosystems, design and management of nature reserves, captive species propagation, species reintroductions, restoration ecology, organized conservation efforts. No credit toward biological science major.

#### 319 Marine Biology (3)

Prerequisite: Biology 101 or equivalent. Survey of marine plants and animals in their habitats. No credit toward biological science major. (3 hours lecture)

#### 319L Marine Biology Laboratory (1)

Corequisite/Prerequisite: Biology 319. Laboratory and field observation and study of marine plants and animals in their nearshore and coastal habitats. No credit toward biology major. (3 hours laboratory or fieldwork; weekend field trips may be required)

#### 320L Cell and Molecular Biology Laboratory (2)

Corequisites: Biology 312. Laboratory exercises in cell and modern molecular biology including recombinant DNA technologies to give the students experience in the analysis and characterization of cellular components and processes. (6 hours laboratory). Instructional fee.

#### 323 Biology of Sexually Transmitted Diseases (STD) (2)

Prerequisite: one semester of college level biology. The symptoms, diagnosis, treatment and control of a number of sexually transmitted diseases including gonorrhea, syphillis, AIDS, herpes, chancroid and venereal warts. (2 hours lecture)

#### 325 Understanding the Immune System (1)

Prerequisites: Biology 101 or equivalent. Nontechnical overview of the cellular and molecular basis of specific immune responses, allergy, hypersensitivity, immunodeficiency (AIDS, etc.), autoimmunity, immunotherapy, and recent findings. No credit toward biological science major. (3 hours lecture, mini course)

#### 330 Ecology of American Indians (3)

Prerequisite: Biology 101 or equivalent. Interrelationships of native peoples of the Americas with the local flora and fauna and the natural environment. Roles of American Indians in predatorprey interactions, ecological hierarchy, nutrient cycling, successional change and resource management. No credit toward Biological Science major. (3 hours lecture)

#### 340 Field Botany (3)

Prerequisite: Biology 241 or equivalent. The native flora of Southern California. Identification, natural history and factors which determine the distribution of species. (1 hour lecture, 6 hours laboratory or fieldwork; weekend field trips are required)

#### 344 Survey of the Land Plants (4)

Prerequisite: Biology 241 or equivalent. A survey of the anatomical and morphological characteristics of the land plants as they relate to the evolutionary development and ecological strategies of these plants. (2 hours lecture, 6 hours laboratory)

#### 352 Plants and Life (3)

Prerequisite: one semester of college biology. Humans' dependence upon and economic interest in plants throughout the world. The domestication of plants and the origin of agriculture. (3 hours lecture)

#### 353 Principles of Horticulture (2)

Prerequisite: Biology 101 or equivalent. The study of cultivated plants including garden, house, ornamental and fruit plants; their propagation, care and requirements. No credit toward biological science major. (2 hours lecture)

#### 353L Principles of Horticulture Laboratory (1)

Prerequisite: Biology 353, concurrent enrollment in 353, or consent of instructor. The propagation and care of horticultural plants. (3 hours laboratory)

#### 360 Biology of Human Sexuality (2)

Prerequisite: Biology 101 or equivalent. The biology of the human reproductive system. Sexual differentiation, anatomy and physiology, sexual behaviors, procreation, contraception and sexually transmitted disease. No credit toward biological science major. (3 hours lecture per week for 10 weeks)

#### 361 Human Anatomy (4)

Prerequisites: Biology 241 and 261. A systems approach to the structure and function of the human body. For biology majors and related health sciences; students with zoology emphasis should take Biology 463. (2 hours lecture, 6 hours laboratory)

# 362 Mammalian Physiology (4)

Prerequisites: Biology 241 and 261 and one year of college chemistry. The fundamental mechanisms of mammalian physiology. For biology majors and related health sciences. Students with zoology emphasis should take Biology 468. (3 hours lecture, 3 hours laboratory)

#### 367 Insects and the Human Ecosystem (3)

Prerequisite: Biology 101 or equivalent. Insect adaptations, behavior and ecology; their influence on human resources and health. Cultural attitudes toward, and historical importance of insects. No credit toward biological science major. (3 hours lecture)

# 401 Biogeography (3)

Prerequisites: Biology 241 and 261. Evolutionary patterns and mechanisms of distribution of plants and animals in the major habitats of the world. Current concepts and theories. (3 hours lecture)

#### 403 Biosystematics (3)

Prerequisites: Biology 241 and 261. A study of the principles and techniques of biological systematics, focusing on evolutionary mechanisms, phylogenetic relationships, organismic diversity and principles of classification. (3 hours lecture; weekend field trips may be required)

#### 404 Evolution (3)

Prerequisites: Biology 241 and 261. The history of evolutionary thought; origin of universe, earth and life; geological and paleon-tological history of the earth; evidences derived from comparative anatomy, embryology, genetics, zoogeography; mechanisms of evolution. (3 hours lecture)

#### 405 Developmental Biology (3)

Prerequisites: Biology 312, 315, and 320L. Molecular and cellular processes in the development of organisms such as oogenesis, fertilization, cytokinesis-morphogenetic movements, and nucleocytoplasmic interactions. (3 hours lecture)

#### 406 Biometry (4)

Prerequisites: Mathematics 120, 130, or 150A; upper-division standing in biological sciences. Experimental design, interpretation, and application of statistics to biological problems. (3 hours lecture, 3 hours laboratory)

#### 407 Seminar in Human Sexuality (3)

Prerequisites: Biology 241 and 261. The biological-physiological bases of human sexuality as they relate to human sexual interaction and social change. (3 hours lecture/discussion)

## 409 Multivariate Biometry (4)

Prerequisite: Biology 406. Experimental design, interpretation, and application of multivariate statistics to biological problems. Topics include: principal component, discriminant, canonical correlation, ordination, and cluster analyses. (2 hours lecture, 6 hours laboratory)

#### 411 Photomicrography (3)

Prerequisites: Biology 241 and 261 and consent of instructor. Methods and techniques of photomicroscopy emphasizing a variety of subject materials and optical equipment. For students requiring skills in photomicrography for teaching and research. (1 hour lecture, 6 hours laboratory)

# 412 Principles of Gene Manipulation (3)

Prerequisites: Biology 312, 315, 320L and Chemistry 301AB. Current approaches to and applications of recombinant DNA technology. Principles behind construction of recombinant molecules including vectors and enzymes, introduction into organisms, selection, expression of cloned genes, and impact of research on society. (3 hours lecture)

# 413 Advances in Molecular Genetics (3) vaccommand 704

Prerequisites: Biology 312, 315, 320L and Chemistry 301A, B. The organization, replication and function of the genetic material and informational macromolecules. Chromosomal structure and function, recombination, mutagenesis, genetic coding, protein synthesis, biogenesis of RNA molecules and regulation of gene expression. (3 hours lecture)

#### 415 Introduction to Electron Microscopy (4)

Prerequisites: Biology 315 and 320L. Standard and specialized techniques in EM study of biological tissues; operation of scanning and transmission electron microscope, EM darkroom procedures; and interpretation, analysis and presentation of electron micrographs. (2 hours lecture, 6 hours laboratory)

## 419 Marine Ecology (3)

Prerequisites: Biology 241 and 261 or equivalents, Ecology of planktonic, nektonic and benthic organisms; their communities and environments. (3 hours lecture)

#### 419L Marine Ecology Laboratory (1)

Corequisite: Biology 419. Field and laboratory studies of planktonic, nektonic and benthic communities. (3 hours laboratory or fieldwork; weekend field trips may be required)

#### 423 Pathogenic Bacteriology (4)

Prerequisites: Biology 315 and 320L. The biology of infectious diseases; mechanisms of pathogenicity; modes of action of antimicrobial agents. Emphasis on characteristics of specific pathogenic bacteria and their identification. (2 hours lecture, 6 hours laboratory)

# 424 Immunology (4) standal award a golden self-word 1) and

Prerequisites: Biology 302, 315 and 320L; concurrent enrollment in biochemistry is strongly advised. The molecular, cellular and organismic nature of the immune process. Inflammation, phagocytosis, antigens, immunoglobulins and cell-mediated immune phenomena. Modern immunology techniques. (2 hours lecture, 6 hours laboratory-discussion) and an entered an entered and an entered an entered and an entered an entered and an entered and an entered and an entered an entered an entered and an entered an entered and an entered an entered an entered and an entered an entered and an entered an entered an entered and an entered and an entered an entered an entered an

#### 426 Virology (3)

Prerequisites: Biology 302, 312 and 315. Viral structure and replication and host-virus interactions in the viral replication process, with emphasis on animal and bacterial virus systems. (3 hours lecture)

#### 428 Biology of Cancer (3)

Prerequisites: Biology 315 and 320L. Biology 424 is recommended. The cancer problem as a dilemma of biology. Clinical and epidemiological aspects. Current research. (3 hours lecture)

# 432 Microbes and Food Production (2)

Prerequisites: Biology 302 or equivalent. The ancient and modern processes of making cheese from milk, wines from fruits, breads and beers from grains. The microbes involved in transforming the unstable raw materials into more desirable products. (1 hour lecture, 3 hours laboratory or fieldwork; weekend field trips may be required)

## 433 Microbial Problems in Foods (2)

Prerequisites: Biology 302 or equivalent. Food spoilage, food intoxication and foodborne diseases caused by microbes in food processing. The microbes involved, sources of contamination, and methods used in detection and prevention of problems. (1 hour lecture, 3 hours laboratory or fieldwork; weekend field trips may be required)

#### 434 Industrial Microbiology and Applied Biotechnology (4)

Prerequisites: Biology 302, 312 and 315. Current and developing applications of microbiology within industry. Culture enhancement technology, contamination control methodology and government regulations in the production of pharmaceuticals, medical devices, energy, and in agricultural and environmental control. (2 hours lecture, 6 hours laboratory)

#### 438 Public Health Microbiology (4)

Prerequisites: Biology 302. The control and epidemiology of infectious diseases of public health importance, water and sewage microbiology. Control of current problems. (2 hours lecture, 6 hours laboratory)

441 Plant Taxonomy (4) Prerequisites: Biology 241 and 261. Classification and evolution of vascular plants; emphasis on the flowering plants. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

# 442 Pollination Biology (3)

Prerequisite: Biology 241 and Biology 316 or equivalents. Pollination in the plant kingdom. Floral cues, pollination syndromes, pollinator behavior, chemical and physical characteristics of pollination, energetics, gene flow, phenology, and ecological aspects of pollination. (2 hours lecture, 3 hours laboratory or fieldwork)

#### 443 Plant Ecology (4)

Prerequisite: Biology 316 or equivalent. Community and population ecology of terrestrial plants. Environmental factors and plant distribution with emphasis on California vegetation. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

#### 444 Plant Physiology (4)

Prerequisites: Biology 241 and 261 and one semester of organic chemistry. Fundamental mechanisms of plant physiology with primary emphasis on whole plant physiology and physiological ecology. (2 hours lecture, 6 hours laboratory) an enter learned

#### 446 Marine Phycology (4)

Prerequisites: Biology 241 and 261. Biological aspects of marine algae; comparative development, morphology, taxonomy, physiology, and ecology. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required) imported warm agint

#### 450 Conservation Biology (3) (Formerly 550)

Prerequisite: Biology 316 or equivalent and consent of instructor. Current topics involving theory, concepts and techniques in the conservation of biological diversity. (3 hours lecture.)

#### 460 Embryology (4)

Prerequisites: Biology 131, 261 and 315 or equivalents. Comparative and experimental analysis of the development of invertebrate and vertebrate animals including man. Laboratory emphasizes living invertebrate and vertebrate embryos. (2 hours lecture, 6 hours laboratory)

#### 461 Invertebrate Zoology (4)

Prerequisites: Biology 241 and 261. Evolution, classification, phylogeny, morphological and physiological adaptations, invertebrate animals. Dissection, identification and observation of extant animals. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

#### 462 Biomedical Parasitology (4)

Prerequisites: Biology 241 and 261. Interrelationships between parasites and their hosts. Disease-causing organisms, their life cycles, detection and diagnosis. (2 hours lecture, 6 hours laboratory)

#### 463 Comparative Vertebrate Anatomy (4)

Prerequisites: Biology 241 and 261. The chordates; morphology and evolution of organ systems of the chordates with special emphasis on vertebrates. Comparative dissection of numerous vertebrates. (2 hours lecture, 6 hours laboratory)

#### 464 Human Embryology (4)

Prerequisite: Biology 261. Human development from gametogenesis through organogenesis. Frog, chick and pig serial sections; histogenesis and organogenesis. (2 hours lecture, 6 hours laboratory)

## 465 Animal Ecology (4)

Prerequisites: Biology 241 and 261, Biology 316 recommended. The factors that affect the distribution and abundance of animals. Field techniques, statistical applications and theoretical approaches. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

#### 466 Animal Behavior (3)

Prerequisites: Biology 241 and 261. The current problems in animal behavior; sensory capacities, orientation, innate and learned patterns, and social behavior of invertebrates and vertebrates. (3 hours lecture)

#### 466L Animal Behavior Laboratory (1)

Corequisite: Biology 466. Experiments in the analysis of behavioral patterns. (3 hours laboratory or fieldwork; weekend field trips may be required)

#### 467 Entomology (4)

Prerequisites: Biology 241 and 261. Anatomy, physiology, evolution and biology of insects and other terrestrial arthropods. Dissection, collection, identification and observation of living arthropods. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

#### 468 Comparative Animal Physiology (4)

Prerequisites: Biology 241 and 261 and one year of college chemistry, Biology 463 recommended. Comparative study of organ systems and physiological processes among representative animals. (2 hours lecture, 6 hours laboratory, weekend field trips may be required.)

#### 470 Cellular Neurobiology (4)

Prerequisites: Biology 315, 320L and 362. Processes of cell communication, particularly in nervous systems. Molecular biology of neuron, model sensory and motor systems, and cellular basis for behavior. Laboratory experience in electrophysical, anatomical, and pharmacological techniques of nerve cell study. (2 hours lecture, 6 hours laboratory)

# 472A Advances in Biotechnology Laboratory (3) (Same as Chemistry 472A)

# 472B Advances in Biotechnology Laboratory (3)

Prerequisites: Biology/Chemistry 472A. Second semester exploring biotechnology techniques for gene product analysis: DNA sequencing site-directed mutagenesis, predicting amino acid changes, protein overproduction, enzyme function assays, protein identification/preparation by gel techniques, immunoblotting. (1 hour discussion, 6 hours laboratory). (Same as Chemistry 427B)

# 474 Natural History of the Vertebrates (4)

Prerequisites: Biology 241 and 261. Natural history of the vertebrates. Observation, identification, behavior, ecology and distribution of the vertebrates. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

# 426 Virology (3) Prerequisites: Biology 932, 312 and 935 (4)

Prerequisites: Biology 241 and 261. The systematics, evolution, morphology, physiology, ecology and behavior of fishes. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

#### 476 Herpetology (4)

Prerequisites: Biology 241 and 261. The biology, structure, physiology, ecology, distribution, identification, collection, evolution and behavior of amphibians and reptiles. (2 hours lecture, 6 hours laboratory or fieldwork; weekend field trips may be required)

# 477 Advances in Biotechnology (3)

(Same as Chemistry 477) Common of vain aging

#### 478 Mammology (4)

Prerequisites: Biology 241, 261, and 316 or equivalent. The systematics, evolution, morphology, physiology, ecology and behavior of mammals. (2 hours lecture, 6 hours laboratory or fieldwork, plus two weekend fieldtrips)

#### 479 Ornithology (4)

Prerequisites: Biology 241, 261 and 316. Anatomy, physiology, evolution, behavior, and ecology of birds. Laboratory and fieldwork in identification, anatomy, observational techniques and community composition: (2 hours lecture, 6 hours lab or fieldwork per week; one or more weekend fieldtrips)

#### 480 Advanced Topics in Undergraduate Biology (1-3)

Prerequisites: upper-division students majoring in biological science and consent of instructor. Current topics, updating of concepts, recent advances and unification of the principles of biology. May be repeated for credit.

#### 491 Advanced Topics in Ocean Studies (1-4)

Prerequisite: upper-division or graduate standing in biology. Selected topics in ocean studies with an emphasis on the characteristics and problems of the local marine environment. May be repeated for credit under a different topic.

#### 491L Laboratory Topics in Ocean Studies (1-2)

Prerequisite: upper-division or graduate standing in biology. Corequisite: Biology 491. Selected lab topics in ocean studies with an emphasis on the characteristics and problems of the local marine environment. May be repeated for credit under a different topic.

#### 495 Biological Internship (3)

Prerequisites: Biology 241 and 261 and college chemistry; upperdivision or graduate standing and consent of instructor. Biological, ecological, and health-related fields. Ninety (90) hours of practical experience in student's chosen field of interest with public or private agencies or businesses. May not be repeated for credit. (1 hour lecture/ discussion, laboratory work experience)

#### 496 Biology Tutorials (1-3)

Prerequisite: Junior or senior standing in biology and consent of instructor. Supervised experience in biological science teaching through tutoring or assisting in laboratory or field class. No credit toward biological science major.

#### 499L Independent Laboratory Study (1-3)

Junior or senior standing with consent of instructor with whom the student wishes to pursue independent laboratory study in biology. May be repeated for credit.

#### 500A Professional Aspects of Biology (1)

Prerequisite: Graduate standing and concurrent enrollment in Biology 500B. Discussions concerning research protocol, scientific methodology and communication techniques. Ethics and social responsibilities of professional biologists. (1 hour discussion)

#### 500B Professional Aspects of Biology (1)

Prerequisite: Graduate standing and concurrent enrollment in Biology 500A. Individualized project work and experiences in scientific writing. Required of all students upon admission to the graduate program. (3 hours project work)

#### 505T Seminar in Molecular, Cellular, Immunological and Physiological Biology (3)

Prerequisite: graduate standing. Selected advanced topics. May be repeated for credit.

#### 517T Seminar in Ecological and Organismic Biology (3)

Prerequisite: graduate standing. Selected advanced topics. May be repeated for credit.

#### 520T Seminar in Microbiology (3)

Prerequisite: graduate standing. Selected advanced topics. May be repeated for credit.

#### 580 Advanced Topics in Graduate Biology (1-3)

Prerequisites: graduate standing in biology and consent of instructor. Current research topics, experimental design and problem solving in biological systems. May be repeated for credit.

# 598 Thesis (1-3)

May be repeated for a maximum of 6 units of credit.

#### 599 Independent Graduate Research (1-3)

Open to graduate students with consent of instructor with whom the student wishes to pursue independent study in biology. May be repeated for credit.

# Department of Chemistry and Biochemistry

Department Chair: Glenn Nagel Vice Chair: Bruce Weber

Department Office: McCarthy Hall 580

Programs Offered

Bachelor of Science in Biochemistry

Bachelor of Science in Chemistry

Bachelor of Arts in Chemistry

Minor in Chemistry

Minor in Biotechnology

Emphasis in Environmental Chemistry

Master of Science in Chemistry

Emphasis in Geochemistry

Single Subject Credential in Teaching (Modified Option 1)

## Faculty

Robert Belloli, Richard Deming, Barbara Finlayson-Pitts, Christina Goode, Steven Hardinger, A. Scott Hewitt, Gene Hiegel, Katherine Kantardjieff, Maria Linder, Glenn Nagel, John Olmsted, Carl Prenzlow, Harold Rogers, Eric Streitberger, Wayne Taylor, Joseph Thomas, Bruce Weber, Patrick Wegner, Gregory Williams, W. Van Willis, Dorothy Pan Wong

Undergraduate — Gregory Williams/Bruce Weber Graduate — Richard Deming

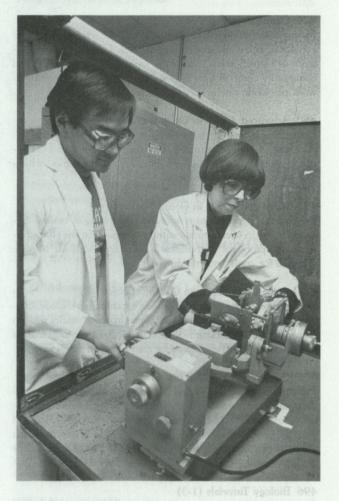
#### INTRODUCTION

The Department of Chemistry and Biochemistry is on the approved list of the American Chemical Society.

The curriculum is planned to provide thorough instruction in the basic principles and concepts of chemistry and biochemistry for students who will (1) advance to graduate work in chemistry or biochemistry; (2) teach in the science programs of secondary schools; (3) seek employment in industry or government; (4) advance to medical or dental training or (5) pursue a degree or minor in support of a career in other areas such as physics, biology, geology, business and computer science.

The department offers three bachelor's degrees, the Bachelor of Science (B.S.) and the Bachelor of Arts (B.A.) in Chemistry and the Bachelor of Science (B.S.) in Biochemistry.

To qualify for either of these degrees, students must earn a C grade in all courses required for the major including prerequisites in related sciences or mathematics.



#### Internships

Internship in chemistry (Chemistry 490B) provides practical work experience which integrates with the student's classroom studies.

#### Recommended Program in General Education

Because of high unit requirements for chemistry degree programs, a student majoring in chemistry is strongly urged to consult with a chemistry faculty adviser prior to designing his/her general education package.

#### Upper-Division Baccalaureate Writing Requirement

Chemistry and biochemistry majors can meet the coursework portion of the University's upper division writing requirement by passing either English 301 or English 360.

#### BACHELOR OF SCIENCE IN BIOCHEMISTRY

The B.S. degree in Biochemistry is recommended for students planning to go directly into professional biochemistry and for students planning to attend graduate school in biochemistry or molecular biology. It is also excellent preparation for medical, dental and pharmacy school.

## Chemistry & Biochemistry Courses (40 units)

Chemistry & Diochemistry Courses (40 units)	
t where a more in reason the world be lappropriate atchede	Inits
General Chemistry (Chem 120A,B)	. 10
Organic Chemistry (Chem 301A,B)	6
Organic Chemistry Laboratory (Chem 302)	2
Theory of Quantitative Chemistry (Chem 315)	3
Quantitative Laboratory A (Chem 316A)	1
Intro to Physical Chemistry (Chem 361A,B)	6
Biochemistry Laboratory (Chem 422)	2
General Biochemistry (Chem 423A,B)	6
Career Options in Chemistry (Chem 490A)	1
Senior Research (Chem 495)	3
Total	
Note: The following substitutions are acceptable and depen	
upon your career goals may be recommended:	
Chem 305A,B for Chem 301A,B	
Chem 371A,B for Chem 361A,B	
Chem Jan, biol Chem Jora, b	

related Courses (50-57)	Units
Elementary Physics (Physics 211A, B)	6
Elementary Physics Lab (Physics 211AL, BL)	2
Analytic Geometry and Calculus (Math 150A,B)	8
Principles of Biology (Biol 131)	3
Genetics and Molecular Biology (Biol 312)	3

Related Courses (36-39)

Two of the following, one of which must be in Biology:	
Biol 302, 315, 362, 405, 412, 413, 424;	
Bio/Chem 472A, 472B, 477; Chem 325, 411 (3 units),	
430, 431 or 445 5	5-6

Intro to Computer Programming (Computer Sci 112 or Digital Computation (EG-GN 205) or Approved Elective	
Advanced College Writing (English 301)	
or Scientific and Technical Report Writing	
(English 360)	
Remainder of general education and elective units.	48-51
Total	124

Note: The following substitutions are acceptable and depending upon your career goals may be recommended:

Physics 225A, B for Physics 211A, B Physics 225AL, BL for Physics 211AL, BL

#### BACHELOR OF SCIENCE IN CHEMISTRY

The Bachelor of Science degree in chemistry is recommended for students planning to go directly into professional chemistry and for those who wish to do graduate work in physical, analytical, organic or inorganic chemistry. Students who complete this program and include an advanced course in instrumental analysis (such as Chemistry 411) and advanced inorganic chemistry (425) will qualify for certification by the American Chemical

# Basic Requirements

Courses Normally Taken During the First Two Years (These courses are prerequisite to the additional required chemistry courses.):

General Chemistry (Chemistry 120A,B) 10
Organic Chemistry (Chemistry 305A,B) 10
Quantitative Chemistry (Chemistry 315) 3
Fundamental Physics (Physics
225A,B,C, 225AL,BL,CL)
Analytic Geometry and Calculus
(Math 150A,B)
Total
ditional Required Chemistry Courses Units
Integrated Laboratory (Chemistry 355) 3

Iditional Required Chemistry Courses	Units
Integrated Laboratory (Chemistry 355)	3
Inorganic Chemistry (Chemistry 325)	3
Inorganic Chemistry Laboratory (Chemistry 325L)	1
Physical Chemistry (Chemistry 371A,B)	6
Quantitative Chemistry Laboratory (Chemistry 316.	
Career Options in Chemistry (Chem 490A)	1
Senior Research (Chemistry 495)	4
Upper-division elective	3
Total	

The following upper-division chemistry courses are not allowable toward the upper-division elective requirement: Chemistry 480A, 490B, 495, 496 and 499.

Other Requirements Units
Calculus and Linear Algebra (Math 250A,B) 8 Advanced College Writing (English 301
or English 360)
Computer Programming (Engineering 205
or Computer Science 112)
Career breadth9
Remainder of general education and
elective units
Total

#### Career Breadth Requirements

The career breadth requirement is satisfied by taking nine units of upper division coursework directly related to the student's career plans and approved in advance by the undergraduate adviser.

#### BACHELOR OF ARTS IN CHEMISTRY

The Bachelor of Arts in Chemistry is offered for students who are planning careers which require a sound background in fundamental chemistry, but not at the depth of the B.S. degree.

The B.A. is particularly suited for those who plan to go into areas such as secondary education, technical sales, food processing, chemical patent law and forensic sciences.

# Basic Requirements

Courses Normally Taken During the First Two Years (These courses are prerequisite to the additional required chemistry courses):

English (ett. mannel ) mannel 2 et ummed Units
General Chemistry (Chemistry 120A,B)
[Students may substitute Chemistry 305A,B
Quantitative Chemistry (Chemistry 315)
Elementary Physics (Physics 211A,B, 211AL,BL) 8
Analytic Geometry and Calculus (Math 150A,B) 8  Total
Additional Required Chemistry Courses Units
Analytical Chemistry (Chemistry 316A,B) 2 Inorganic Chemistry (Chemistry 325)
(Chemistry 361A,B)
Senior Research (Chemistry 495)
Total

Other Requirements	Units
Advanced College Writing (English 301 or 360	)) 3
Computer Programming (Engineering 205	
or Computer Science 112)	3
or Approved Elective	
Remainder of general education and elective	
units	//
Total	72

#### MINOR IN CHEMISTRY

0

A minor in Chemistry requires a minimum of 24 acceptable units of chemistry, including general chemistry (Chemistry 120A,B) plus 14 units of upper-division chemistry courses. (The following upper-division chemistry courses are not applicable toward a minor: Chemistry 480A, 490A, 490B, 495, 496 and 499). These courses must be completed with an overall GPA of 2.0.

The chemistry minor is appropriate for students majoring in a number of areas. Some upper-division course combinations which constitute appropriate minors are: Medical Technology: Chemistry 301A,B, 302, 430. Molecular Biology: Chemistry 301A,B, 302, 421A,B. Geological Sciences: Chemistry 301A, 315, 361A,B or 325. Physics: Chemistry 301A,B, 315, 371A,B. Science Education: Chemistry 301A,B, 361A,B, 325. Other areas where a minor in chemistry would be appropriate include Art Restoration, Forensic Science, Industrial Administration, Science Writing, and Environmental or Patent Law. Students with interests in these or other areas should consult the chemistry undergraduate adviser about courses appropriate for a minor.

#### MINOR IN BIOTECHNOLOGY

See description of this minor under the Department of Biological Science.

#### EMPHASIS IN ENVIRONMENTAL CHEMISTRY

This program consists of 17-19 units offered under the B.S. in Chemistry, B.A. in Chemistry, or B.S. in Biochemistry. It provides a concentration of specialized knowledge of chemistry with respect to the environment. The coursework addresses issues of concern such as EPA analysis protocols and other analytical methods, the interactions of chemicals with the air, water, and soil environments, how chemicals interact with living systems, chemical hazards, safe handling and disposal of chemicals, and an introduction to the regulatory framework. Interested students should consult their academic adviser for specific course requirements.

# REQUIREMENTS FOR CHEMISTRY MAJORS SEEKING A TEACHING CREDENTIAL

To qualify for a waiver from the examination for a single subject credential in Physical Science, students should elect the B.A. under option one with the following changes:

- 1. Students should take Science Education 312.
- 2. Students must take: Biology 131; and 241 or 261.
- 3. Students must take Physics 225A,B,C and 225AL, BL,CL instead of Physics 211A,B and 211AL,BL.
- Students must take these additional courses: Geological Sci 101,101L, and 201 and Physics 200.

#### MASTER OF SCIENCE IN CHEMISTRY

The degree is designed to qualify students for more advanced work in chemistry, to provide preparation which will lead to responsible positions in industrial or government research and development laboratories, and to provide preparation for the effective teaching of chemistry in the high schools and community colleges.

The program provides fundamental courses at a level and depth commensurate with those taken during the first year of a doctoral program and provides an introduction to research and research methods.

#### Admission of his ball and the same and with the same of the

Students must meet the university requirements for admittance to the university. This normally requires a baccalaureate degree from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. (See the section of this catalog on Graduate Admissions for a complete statement and procedures.) In addition to university requirements, in order to achieve conditionally classified standing in the chemistry program, a student must meet the following requirements:

- 1. An undergraduate degree in chemistry or a selection of science courses deemed as adequate preparation for further study in chemistry by the Department Graduate Committee; and
- 2. A 2.5 GPA in upper division chemistry courses.

#### Classified Standing

Each student is required to take area examinations in the areas of physical and organic chemistry plus two from the areas of analytical, inorganic or biochemistry. The results of these examinations are used in advising the student and as criteria for advancement to classified standing. In order to proceed from conditionally classified to classified standing, the student must meet the following requirements:

- Satisfactory grades on three of the four qualifying examinations or completion of department approved courses in these areas with grades of B or better;
- 2. Approved selection of a research director
- 3. An approved study plan.
- 4. The University graduate level writing requirement.

# Study Plan Laborator (3)

Two alternatives are available for the study plan. The student can do either a laboratory thesis (preferred) or a library thesis.

The degree program consists of 30 units of graduate committee-approved course work completed with a minimum grade-point average of 3.0 in all course work exclusive of Chemistry 505A,B and 599. Each student prepares a study plan in consultation with the graduate program adviser which must be approved by the student's research director, the department, Internal Affairs Committee and the dean of graduate studies. All chemistry courses on the study plan must be 400 level or above.

Study plans may contain no more than 2 units of Chemistry 505, and no more than 6 units of Chemistry 599 (3 units for students electing the library thesis alternative).

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1.	Basic requirements (53100) or established seeds to mathesitories
	Courses required of all students:
	Chemistry 505A,B Seminar 2
	Chemistry 599 Independent Graduate Research 3
	Chemistry 598 Thesis 1-6

2. 500-level Requirements and demand of the second Education of the second seco

A minimum total of 15 units of 500-level courses is required.

# 3. Specialization Requirements and bounded by both page 18 and 18

The courses in the study plan must include a minimum of nine units (not including Chemistry 505A, B, 598, 599) in one of the following areas of specialization, including related areas: (1) analytical chemistry; (2) biochemistry; (3) inorganic chemistry; (4) organic chemistry; (5) physical chemistry. An emphasis in geochemistry is also available. Please consult with the Chemistry or Geology Graduate adviser for more information.

# 4. Breadth Requirements (promoted to be broaded and

In order to insure sufficient breadth and background, one course is required from each of the following groups if the student has not passed (with a B or better) an equivalent course as an undergraduate. However, courses taken as an undergraduate cannot be applied to the 30 units required for graduation, unless they are in excess of the undergraduate degree requirement.

Units	1
Group I an analysis and a property of the property base of the property of the	
Chemistry 411 Instrumental Analysis 4	
Chemistry 425 Advanced Inorganic Chemistry 3	
thermodynamics, chemical could rum (gaseeus, a recous,	
Group II	
Chemistry 423A General Biochemistry 3	
Chemistry 431 Advanced Organic Chemistry 3	
lecture, 6 hours laboratory). Instructional fee. (120A = C	

Group III	
Chemistry 550	Advanced Thermodynamics 3
Chemistry 551	Quantum Chemistry 3
	Physical Biochemistry (for Biochemistry
students only)	

For further details or advisement concerning the M.S. program, contact the graduate adviser.

# Chemistry and Biochemistry Courses

#### 100 Survey of Chemistry (3)

Prerequisite: one year of high school algebra. The fundamental principles of chemistry; atomic and molecular structure and the application of these principles to contemporary problems. For the nonscience major. (3 hours lecture)

#### 100L Survey of Chemistry Laboratory (1)

Prerequisite: concurrent or prior enrollment in Chemistry 100. Experiments chosen to develop laboratory techniques; chemical principles and their application to environmental and societal problems. (3 hours laboratory). Instructional materials fee.

#### 111 Nutrition and Drugs (3)

The basics of nutrition; diet, food additives, vitamins, hormones, drugs, disease and related biochemical topics. Current controversies, popular practices, fads and fallacies. For the non-science major. (3 hours lecture)

#### 115 Introductory General Chemistry (4)

Prerequisite: one year of high school algebra. Chemistry at the basic level. For students with limited background in chemistry who plan to take additional chemistry or other science courses. Does not fulfill chemistry requirements for majors or minors in the physical or biological sciences. (3 hours lecture, 3 hours laboratory) Instructional materials fee.

#### 120A,B General Chemistry (5,5)

Prerequisites: two years of high school algebra plus one year of high school chemistry with a grade of B or better or Chemistry 115 with a grade of C or better or Mathematics 125 with a grade of C or better. High school physics strongly recommended. For majors and minors in the physical and biological sciences. Instructional materials fee. A — The principles of chemistry: stoichiometry, acids, bases, redox reactions, gas laws, solid and liquid states, changes of state, modern atomic concepts, periodicity and chemical bonding. Laboratory: elementary physical chemistry and volumetric quantitative analysis. (3 hours lecture, 6 hours laboratory) (Instructional materials fee required.) B — Chemical thermodynamics, chemical equilibrium (gaseous, aqueous, acidbase, solubility and complexion), elementary electrochemistry and chemical kinetics. Laboratory: quantitative analysis and elementary physical chemistry; some qualitative analysis. (3 hours lecture, 6 hours laboratory). Instructional fee. (120A = CAN CHEM 2, 120B = CAN CHEM 4)

#### 125 General Chemistry for Engineers (3)

Prerequisites: Chemistry 120A and a major in engineering. The topics are the same as Chemistry 120B but without laboratory. Not open to students with credit in Chemistry 120B. (3 hours lecture).

#### 196 Student-to-Student Tutorials (1-3)

Supervised experience in chemistry teaching through tutoring or assisting in lower-division laboratory or field classes. Consult "Student-to-Student Tutorials" in this catalog for prerequisites and a more complete course description.

#### 210 Introductory Chemical Computation (2)

Prerequisites: Chemistry 120A,B and a major in chemistry or biochemistry. Introduction to the use of spreadsheets and C language programming for chemical problem solving and data management. Chemical algorithms; data analysis and interpretation; graph selection and preparation; data base creation and management; file transfers between programs and operating systems.

#### 295 Directed Study (1)

Prerequisite: consent of instructor. Research in chemistry under the supervision of a chemistry department faculty member. Credit/no credit only. May be repeated for credit. Does not count towards major. All undergraduate students engaged in a chemistry research project must be enrolled in either Chemistry 295 or 495. (3 hours laboratory per unit)

#### 301A,B Organic Chemistry (3,3)

Prerequisite: Chemistry 120A, B. Properties and reactions of aliphatic and aromatic compounds, theories of structure, and reaction mechanisms. For the nonchemistry major or for a B.A. in Chemistry or B.S. in Biochemistry. (3 hours lecture)

#### 302 Organic Chemistry Laboratory (2)

Prerequisite: Chemistry 301A. Corequisite: Chemistry 301B. Techniques for the synthesis, characterization and isolation of typical aliphatic and aromatic compounds. (6 hours laboratory) Instructional materials fee.

#### 302A,B Organic Chemistry Laboratory (1,1)

Chemistry 302A must be taken concurrently with Chemistry 301A. Techniques for the synthesis, isolation and characterization of typical aliphatic and aromatic compounds. Students wishing to fulfill all of their organic chemistry laboratory requirements in a single semester should enroll in Chemistry 302. Instructional materials fee.

#### 305A,B Organic Chemistry (5,5)

Prerequisite: Chemistry 120A,B. Lecture: properties and reactions of aliphatic and aromatic compounds, theories of structure, and reaction mechanisms. Laboratory: techniques for the synthesis, characterization and isolation of typical aliphatic and aromatic compounds, with applications of instrumental and spectroscopic methods. Designed for students in the B.S. program in Chemistry. (3 hours lecture, 6 hours laboratory) Instructional materials fee.

# 311 Nutrition and Disease (3)

Prerequisites: Chemistry 111 and Biology 101. Relationship between nutrients and disease, with an emphasis on cancer, atherosclerosis and infectious illness. Dietary factors that modify and/or contribute to the disease process from the viewpoints of physiology, biochemistry and immunology. (Same as Biology 311.) (3 hours lecture)

#### 315 Theory of Quantitative Chemistry (3)

Prerequisite: Chemistry 301A or 305A. Physics 211A, B or Physics 225A,B strongly recommended. Modern analytical chemistry; aqueous and nonaqueous equilibrium calculations, electrochemistry, spectrometry, and contemporary separation methods with emphasis on chromatography. (3 hours lecture)

#### 316A Quantitative Chemistry Laboratory A (1)

Prerequisite: One semester of organic chemistry. Corequisite: Chemistry 315. Modern analytical chemistry laboratory: polyprotic acids, liquid chromatography, electrochemistry, absorption spectroscopy (ultraviolet/visible, infrared, atomic). (3 hours laboratory) Instructional materials fee.

#### 316B Quantitative Chemistry Laboratory B (1)

Prerequisites: Chemistry 316A and Chemistry 315. Modern analytical chemistry laboratory: complexometric titrations, gas chromatography, spectroscopy and electrochemistry. Computer acquisition and analysis of data. (3 hours laboratory) Instructional materials fee.

#### 321 Molecules and Life (3)

Prerequisites: Completion of general education requirements in fundamentals of physical and biological science. Relationship of molecules and chemical principles to life processes. Historical development of concepts and issues, including the question of reducing biological phenomena to physical law. (Same as History 321.) (3 hours lecture)

#### 325 Inorganic Chemistry (3)

Prerequisites: Chemistry 301A, B or 305A, B. The chemistry of the main group elements and an introduction to transition metal chemistry. (3 hours lecture) man to solgot data analysis analysis

#### 325L Inorganic Chemistry Laboratory (1)

Prerequisite: Chemistry 325. Laboratory techniques in the synthesis and characterization of inorganic and organometallic compounds. Instructional materials fee.

#### 335 Introduction to Environmental Chemistry (3)

Prerequisites: Chemistry 301B and Chemistry 315 or equivalent. An overview of current terminology, regulations, types of hazards, analytical methods, EPA protocol, chemical compatibility and storage, interaction between chemicals and the environment, introduction to water, air, and soil chemistry, assessment of pollution effects, and selected case histories.

# 355 Integrated Laboratory (3)

Prerequisites: Chemistry 301A, B and 302L, or Chemistry 305A,B and Chemistry 315. Corequisites: Chemistry 361B or 371B and Computer Science 112 or the equivalent. Experiments in chemical synthesis, instrumental analysis and physical chemistry. Laboratory training and written presentation of theory, data and results are emphasized. (1 hour lecture, 6 hours laboratory) Instructional materials fee.

#### 361A,B Introduction to Physical Chemistry (3,3)

Prerequisites: Mathematics 150A, B; Physics 211A, B or 225A, B, Chemistry 301A,B or 305A,B. Thermodynamics and kinetics; properties of gases and solutions; molecular structure and energies and application to spectroscopic techniques; liquids, phase equilibria, thermodynamics of multicomponent systems with application to the life sciences. (3 hours lecture)

#### 371A,B Physical Chemistry (3,3)

Prerequisites: Mathematics 250A, Physics 225A, B and Chemistry 305A, B. Corequisite: Mathematics 250B. Thermodynamics, solutions, chemical and phase equilibria, electrochemistry, transport phenomena, introduction to atomic and molecular structure, rotation and vibration spectroscopy, statistical mechanics, kinetics. The use of fundamental principles to solve problems. (3 hours lecture) - (12 has marked to all use no magoo base as xelomo)

## 403 Analysis of Organic Compounds (4)

Prerequisites: Chemistry 301A, B and 302L or 305A, B. Chemistry 355A. Isolation and identification of organic compounds using chemical and instrumental techniques. (2 hours lecture, 6 hours laboratory) Instructional materials fee.

#### 411A-G Instrumental Analysis (1)

Prerequisites: Chemistry 315 and 355 or 422. Corequisite: Chemistry 371B or 361B. 1 unit modules. Students wishing an ACS certified degree must take three units. A — Optical Spectroscopy (UV/visible, infrared, atomic absorption, flame emission) Instructional materials fee (refundable); B — Magnetic Resonance (nuclear magnetic resonance, electron spin resonance) Instructional materials fee (refundable); C — Separations (high performance liquid chromatography, gas chromatography) Instructional materials fee (refundable); D — Electrochemistry (polarography (d.c., pulse, a.c.), cyclic voltammetry, coulometry); E — Radiochemistry; F — Computers and Interfacing. Instructional materials fee (refundable). G — G-Mass spectrometry (conventional magnetic sector, quadrupole, Fourier transform, tandem, and time-of-flight; hyphenated techniques including gas chromatography (GC-MS), liquid chromatography (LC-MS). Instructional materials fee (refundable). (2 hours lecture, 6 hour laboratory)

#### 421A,B Biological Chemistry (3,3)

Prerequisite: Chemistry 301A,B and Chemistry 302L. Corequisite: Biology 315. Major areas of biochemistry, including chemistry and functions of compounds of biochemical interest. Mechanisms and thermodynamics of intermediary metabolism. Biochemical foundations of the health sciences. Designed for biology majors. (3 hours lecture)

#### 422 General Biochemistry Laboratory (2)

Prerequisites: concurrent or prior enrollment in Chemistry 421A,B or 423A,B. The chemistry and metabolism of carbohydrates, nucleic acids, lipids and proteins; techniques of enzyme chemistry and isolation; research methods. (6 hours laboratory) Instructional materials fee.

#### 423A,B General Biochemistry (3,3)

Prerequisites: Chemistry 301A,B and 302L or Chemistry 305A,B; Chemistry 315. Corequisite: Chemistry 361A or 371A. Survey of biochemistry; structural chemistry and function of biomolecules, bioenergetics and intermediary metabolism; replication and expression of the genetic material. Designed for biochemistry majors. (3 hours lecture)

#### 425 Advanced Inorganic Chemistry (3)

Prerequisites: Chemistry 325 and 361A, B or 371A, B. The bonding, structure and reactivity of transition and lanthanide elements. Molecular orbital and ligand field theory, classical metal complexes and organometallic chemistry of the transition elements. (3 hours lecture)

#### 430 Clinical Chemistry (2)

Prerequisites: Chemistry 421A or Chemistry 423A. Biochemistry of disease, emphasizing our understanding of the biochemical phenomena, principles and theory underlying the use of common laboratory tests to assess human health. (2 hours lecture)

#### 430L Clinical Chemistry Laboratory (2)

Prerequisites: Chemistry 422A and either Chemistry 421A or 423A. Corequisite: Chemistry 430. Practice in clinical chemistry: Solutions, quantitative analysis, theory and application of common tests used to monitor human health and disease. Instructional materials fee. (6 hours laboratory)

#### 431 Advanced Organic Chemistry (3)

Prerequisites: Chemistry 361A,B or 371A,B. Theoretical and physical aspects of organic chemistry. The modern concepts of structure, and reaction mechanisms. (3 hours lecture)

#### 435 Chemistry of Hazardous Materials (2)

Prerequisites: Chemistry 335, or equivalent. An in-depth examination of hazardous chemicals; organic and inorganic air-and-moisture-sensitive compounds, reactive metals; chemical reactivity patterns; chemical compatibilities; storage and handling; methods of disposal and waste containment; Federal and local regulations; case histories. (2 hours lecture)

#### 438 Environmental Biochemistry (2)

Prerequisites: Chemistry 301B plus Chemistry 335 or Chemistry 423A (or Chemistry 421A), or equivalent. Effects of current agricultural, industrial and mechanical practices on the composition, metabolism and health of soil, plants, animals and man, from a biochemical perspective; mechanism of action and degradation of common agricultural chemicals and industrial pollutants. (2 hours lecture)

#### 445 Nutritional Biochemistry (3)

Prerequisites: Chemistry 423A or Chemistry 421A, or one semester biochemistry. Nutrition, metabolism and excretion of carbohydrates, proteins, fats, vitamins, major minerals and trace elements from a biochemical perspective. Relevant variations in dietary practices related to life stages and specific illnesses. (3 hours lecture)

#### 472A Advances in Biotechnology laboratory (3)

Prerequisites: Biology 320L or Chemistry 422C. Corequisite: Biology 412. First semester exploring biotechnology techniques for DNA cloning and analysis: restriction enzyme cutting, DNA sequencing, sequence analysis by computer, plasmid cloning, genomic library production and screening, DNA probe hybridization. (6 hours of laboratory, 1 hour of lecture/discussion). Instructional fee. (Same as Biology 472A)

# 472B Advances in Biotechnology Laboratory (3) (Same as Biology 472B)

### 477 Advances in Biotechnology (3)

Prerequisite: Biology 312. Corequisite: Biology 412 or Chemistry 421B or 423B. Current topics in biotechnology centering on techniques for molecular cloning and DNA sequencing of genes. Medical breakthroughs for diagnosis of mutations and gene therapy. Role of biotechnology in agriculture, energy and environment. Bioethical issues. (Same as Biology 477) (3 hours lecture)

#### 480A Topics in Contemporary Chemistry (1)

Prerequisite: upper-division standing in chemistry. Research seminar dealing with topics of current interest in chemistry such as photochemistry, biochemistry, analytical chemistry and organometallic chemistry. Credit/no credit only. Not applicable toward master's degree. May be repeated for credit.

### 480BT Topics in Contemporary Chemistry (2-3)

Prerequisite: upper-division standing in chemistry. Special lecture topics of current interest in chemistry. May be repeated for credit. (1 hour lecture per unit)

#### 490A Career Options in Chemistry (1)

Prerequisites: upper-division standing in chemistry; Chemistry 355 or 422; and consent of instructor. Career options in chemistry. Credit/no credit only. (1 hour lecture)

#### 490B Internship in Chemistry (1-2)

Prerequisites: upper-division standing in chemistry; Chemistry 355 or 422; and consent of instructor. Internship in chemistry. Work in projects in industrial, governmental or medical laboratories. May count as career breadth requirement units for chemistry majors. May be repeated once. Does not count toward M.S. degree.

#### 495 Senior Research (1-3)

Prerequisites: three one-year courses in chemistry, senior standing and consent of instructor. The methods of chemical research through a research project under the supervision of one of the Chemistry Department faculty. May be repeated for credit. Only 6 units may apply toward B.A. or B.S. degree (3 hours per week per unit)

#### 496 Student-to-Student Tutorials (1-3)

Supervised experience in chemistry teaching through tutoring or assisting in laboratory or field classes. Consult "Student-to-Student Tutorials" in this catalog for prerequisites and a more complete course description.

#### 499 Independent Study (1-3)

Prerequisites: upper-division standing and completion of two one-year courses in chemistry. Special topics in chemistry selected in consultation with the instructor and approval of department chair. May be repeated for credit. Only six units may apply toward B.A. or B.S. degree.

#### 505A Seminar (Participation) (1)

Prerequisites: graduate standing and consent of department. Student attendance at presentations by invited scientists on topics of current interest in chemistry. May not be repeated for credit. (1 hour seminar)

#### 505B Seminar (Presentation) (1)

Prerequisites: Chemistry 505A, graduate standing and consent of the department. Student presentation of recent contributions to the chemical literature. May not be repeated for credit. (1 hour seminar)

#### 511 Theory of Separations (3)

Prerequisites: Chemistry 355 and 361A, B or 371A, B. The theory, application and limitations of physical and chemical separation techniques; chromatography. (3 hours lecture)

#### 517 Computational Chemistry (3)

Prerequisites: Chemistry 355 or 422; 361A,B, 371A,B; and Computer Science 112 or 121 or Engineering 205. Computational methods applied to the solution of chemical problems. (3 hours lecture)

#### 535 Organic Synthesis (3)

Prerequisite: Chemistry 371A, B. Methods of synthetic organic chemistry and their application to construction of organic molecules. (3 hours lecture)

#### 539 Chemistry of Natural Products (3)

Prerequisite: Chemistry 301A, B or 305A, B. The biosynthesis of the alkaloids, terpenes, steroids and other natural products of plant and animal origin. (3 hours lecture)

#### 543 Physical Biochemistry (3)

Prerequisites: Chemistry 361A, B or 371A, B, 421A, B or 423A, B or consent of instructor. Methods for measuring physical properties of proteins and nucleic acids in solution. Thermodynamic and hydrodynamic aspects. (3 hours lecture)

#### 544 Bioenergetics (3)

Prerequisite: Chemistry 421B or 423B. Mechanisms of membrane energy transduction in oxidative phosphorylation, transport, biomechanical work and photosynthesis. Chemiosmotic theory and analysis of current research. (3 hours lecture)

#### 546 Metabolism and Catalysis (3)

Prerequisite: Chemistry 421A, B or 423A, B or consent of instructor. Regulation of biosynthetic and degradative reactions in living systems. The control of enzyme activity and concentration. Mechanisms of hormone action. (3 hours lecture)

#### 550 Advanced Thermodynamics (3)

Prerequisite: Chemistry 371A, B. Advanced chemical and statistical thermodynamics. (3 hours lecture)

#### 551 Quantum Chemistry (3)

Prerequisite: Chemistry 371A, B. Postulates and theories of approximation methods in quantum chemistry, the electronic structure of atoms and molecules, chemical bonds, group theory and applications. (3 hours lecture)

#### 580T Topics in Advanced Chemistry (1-6)

Prerequisites: graduate standing in chemistry. Current research topics in chemistry in the areas of analytical, organic, inorganic, physical and biochemistry. May be repeated for credit. (1 hour seminar per unit) 100 m Abiananyo bas donlar gmoo leximod

### 598 Thesis (1-6) The base allowed and a draw and good and

Prerequisite: an officially appointed thesis committee: Guidance in the preparation of a thesis for the master's degree.

### 599 Independent Graduate Research (1-6)

Prerequisite: graduate standing in chemistry. May be repeated for

# Department of Geological Sciences

Department Chair: Gerald Brem Department Office: McCarthy Hall, 263

Programs Offered Total And El Company of the Angel And Angel Bachelor of Science in Geology Minor in Geology

(Master of Science in Chemistry, Geochemistry Emphasis, offered jointly by the Departments of Chemistry and Biochemistry and Geological Sciences)

#### Faculty

Gerald Brem, Gaylen Carlson, John Cooper, John Foster, Diane Clemens Knott, Neil Maloney, Brady Rhodes, Prem Saint, Mary Templeton

#### Advisers

B.S. in Geology: undergraduate adviser. Geochemistry Emphasis, M.A. in Chemistry: Gene Hiegel (Department of Chemistry), Gerald Brem, Geological Sciences. Earth Science Education: Gaylen Carlson. All students must receive advisement immediately upon entering the major in order to design a course progression. Geology students must meet with the undergraduate adviser each semester prior to registration for the following semester. The adviser will assist in scheduling courses, selection of courses to meet the student's educational objective and solving problems should any arise.

#### INTRODUCTION

Geological sciences is the study of the Earth, its physical nature, chemical composition and dynamics, as well as its origin, evolution, present state and future. In addition to the quest for understanding the way the Earth works and its relation to the solar system, geological scientists are involved in the search for energy, mineral and water resources, the evaluation and remediation of environmental hazards, and the prevention and/or prediction of natural disasters such as earthquakes, volcanic eruptions, landslides, coastal erosion, and floods. About 60% of all geological scientists are employed by private industry, primarily by engineering, environmental, petroleum and mining companies. Others are employed by government agencies, educational institutions and research centers.



Within the general field of geological sciences the department has six major areas of study: geology, geochemistry (the integration of geology and chemistry), geophysics (the integration of geology and physics), hydrogeology (the integration of geology with fresh water systems), engineering geology (the integration of geology and engineering) and geological oceanography. All are designed to prepare students for (1) graduate studies in the geological sciences, (2) direct employment in industry or government, (3) teaching, and (4) an avocation and an appreciation and understanding of the earth.

#### Evening Program

The department offers an evening and weekend program of courses that satisfy requirements for the major with the exception of the field camps. Consult the department for details.

#### Internships

The department offers an internship program through Geological Sciences 495. This allows the student to obtain on-the-job experience in the geological sciences. Three units maximum are permitted toward the degree.

#### Recommended Program in General Education

The department maintains a list of preferred general education courses. A copy can be obtained by visiting or telephoning the department office.

#### BACHELOR OF SCIENCE IN GEOLOGY

Of the 132 units required for graduation, 48 are in geological sciences, 34 to 37 in related fields, 39 in general education courses (other than related fields) and the remaining 8 to 11 undesignated units are selected to meet particular needs of each student. To qualify for the B.S. degree, students must have a C or better in all geological sciences courses taken to meet the 48 unit requirement; students must have a C average in required courses in related fields. A proficiency in a modern foreign language, or a computer language, is recommended for students who plan to continue in graduate school. Proficiency in English composition is required.

#### Minimum Course Requirements for the Major

Geol Sciences 101, 101L Physical Geology (3,1)

Geol Sciences 201 Earth History (4)

Geol Sciences 303A,B Mineralogy & Petrology (4,4)

Geol Sciences 321 Sedimentation and

Stratigraphy (4)

Geol Sciences 360 Structural Geology (4)

Geol Sciences 380 Geol. Field Techniques (4)

(Meets requirement for upper-division writing course.)

Geol Sciences 498 Senior Thesis (1-2)

Geol Sciences 456 Intro to Applied Geophysics (3)

or Geol Sciences 406 Geochemistry (3)

Geol Sciences 481A Geology Field Camp I (3)

and either

Geol Sciences 481B Geology Field Camp II (3)

or Geol Sciences 481C Hydrology Field Camp (3)

#### Adviser-approved Geol Sciences Electives (9-10 units)

No more than 3 units from any combination of Geol Sciences 495, 496L and 499L can be counted toward meeting this 9-10 unit requirement.

(Note: Geol Sciences 120, 120L, 140, 310, 320, 376, and 470 are not accepted as credit toward meeting requirements for the major.) of state of control of the examination for a state of con-

#### Minimum Requirements in Related Fields. (nine courses required, 34-37 units)

Biological Science 101 Elements of Biology (3) or 131 Principles of Biology (3)

Chemistry 120A and 120B General Chemistry (5,5)

Comp Sci 103 Introduction to Personal Computer Applications (3)

or Comp Sci 112 Introduction to Computer Programming (3)

or Comp Sci 121 Programming Concepts (4)

or Engineering 205 Digital Computation (3)

Mathematics 150A and 150B Analytic Geometry and Calculus (4,4).

Physics 225A, 225AL Fundamental Physics — Mechanics (3,1) and either 225B, 225BL Fundamental Physics — Electricity and Magnetism (3,1), or 225C, 225CL, Fundamental Physics — Modern Physics (3,1). Alternatively, 211A, 211AL, 211B, 211BL Elementary Physics (3,1,3,1), with consent of adviser.

One additional semester course selected with approval of adviser from courses such as the following:

Biology 316, 401, 406, 419, 461

Chemistry: 301A, 315, 325, 361A

Computer Science: 241

Engineering: 102, 202, 301, 304, 324, 436

Geography: 312, 381, 384

Mathematics: 250A, 250B, 338

Physics: 225B, 225BL, 225C, 225CL, 310, 320, 330

#### Undesignated Units (8-11 units required)

These are to be taken in geological sciences, related fields and/or career-support fields, with adviser approval.

General Education (39 units required, other than related fields) Consult your adviser for proper course selection.

#### MINOR IN GEOLOGICAL SCIENCES

A minimum of 20 units in geological sciences courses, of which at least 12 must be upper division and at least 6 of these 12 must be taken in residence, is required for a minor. The courses shall be selected by the student in consultation with an adviser. Prospective teachers should include courses in physical geology, earth history, meteorology, oceanography, mineralogy and petrology. Geological Sciences 120, 120L, 140, 310 and 376 are not acceptable as part of the 20 units.

#### Credentials Program

To qualify for a waiver from the examination for a Single Subject Credential in Physical Science, the following courses are required in addition to those for the B.S. degree in Geology:

Chemistry 301A, B. Physics 225A,B,C, 225AL,BL,CL, and 200. Geological Sciences 340 Biological Sciences 101 (and 101L) or 131, and either 241 or 261.

#### MASTER OF SCIENCE IN CHEMISTRY, GEOCHEMISTRY EMPHASIS

See Master of Science in Chemistry in the Department of Chemistry and Biochemistry section of this catalog.

# Geological Sciences Courses

For all courses, prerequisites may be waived if the instructor is satisfied that the student is qualified to take the course.

All lower-division (100-200 level) courses are offered each semester. The department plans to offer in 1993-95 Geological Sciences 303B, 360, 380 and 481B or 481C each fall, Geological Sciences 303A, 321, 335 and 481A each spring and the remaining courses on a three- to four-semester rotation. A schedule of projected class offerings is available from the department.

#### 101 Physical Geology (3)

Prerequisite: high school chemistry or physics, or equivalent. The physical nature of the planet earth, the genesis of rocks and minerals, erosion processes and their effects. (101 & 101L: CAN GEOL 2)

#### 101H Physical Geology (Honors) (3)

Prerequisite: high school chemistry or physics, or equivalent. The physical nature of the planet earth, the genesis of rocks and minerals, erosion processes and their effects. (Weekend field trips)

#### 101L Physical Geology Laboratory (1)

Corequisite: Geological Sciences 101. Laboratory on minerals, rocks, earthquakes, and map and aerial photographic interpretation. (3 hours laboratory or field trip) (101 & 101L: CAN GEOL 2)

#### 101LH Physical Geology Laboratory (Honors) (1)

Corequisite: Geological Sciences 101 or 101H. Laboratory on minerals, rocks, earthquakes, and map and aerial photographic interpretation. (3 hours laboratory and weekend field trips)

#### 120 Introduction to Earth Science (3)

The nature of our planet, its place in space, its atmosphere and oceans, its interior, and its changing surface.

#### 120L Earth Science Laboratory (1)

Corequisite: Geological Sciences 120. Rock and mineral identification, fluvial and marine processes, land-form recognition from topographic maps, geologic maps, air and space photographs. (3 hours laboratory or field trips)

#### 140 Earth's Atmosphere (3)

The composition, structure and circulation of the atmosphere; the origins of storms and other weather disturbances.

#### 201 Earth History (4)

Prerequisite: Geological Sciences 101, 101L. Evolution of the earth as interpreted from rocks, fossils and geologic structures. Plate tectonics provides a unifying theme for consideration of mountain building, evolution of life and ancient environments. (2 hours lecture, 6 hours laboratory, field trips) (CAN GEOL 4)

#### 303A Mineralogy and Introduction to Petrology (4)

Prerequisites: Geological Sciences 101, 101L, Chemistry 120A; Prerequisite or co-requisite: Geological Sciences 201. Crystallography; origin, occurrence, composition and identification of minerals with emphasis on minerals in rocks. (2 hours lecture, 6 hours laboratory, field trips)

#### 303B Igneous and Metamorphic Petrology (4)

Prerequisites: Chemistry 120A; Geological Sciences 303A, 380. Description, classification, occurrence and origin of igneous and metamorphic rocks. (2 hours lecture, 6 hours laboratory, field trips)

#### 310T Topics in California-Related Geology (1-3)

Directed investigations of one aspect of earth science. Alternating topics are: geology of national parks, California geology, ocean off California, California earthquakes, geological hazards of California, and California gems and minerals. May be repeated for credit with a different topic. (3 hours lecture for 5, 10, or 15 weeks, optional field trips) weeks, 101, 101, and 100 leading to 100 leading trips

#### 320 Earth Science for Science Teachers (4)

Prerequisites: Geological Sciences 101 and 101L plus upper division standing or science teaching credential. Major concepts of the earth sciences with primary emphasis on physical and planetary geology and secondary emphasis on meteorology and oceanography. (3 hours of lecture, 3 hours of laboratory, field trips)

#### 321 Sedimentation and Stratigraphy (4)

Prerequisites: Geological Sciences 201, 303B, 380. Textural, mineralogic properties of sediments used in discrimination of depositional conditions, environments, classification of sedimentary rocks, study of stratigraphic patterns. (2 hours lecture, 6 hours laboratory, field trips)

322 Principles of Paleontology (3)

Prerequisites: Geological Sciences 201; Biology 101 or 261 or equivalent. The groups of organisms that have left an important fossil record. Taxonomy, morphology and systematics, biostratigraphy, paleoecology, and evolutionary trends. (2 hours lecture, 3 hours laboratory, field trips)

333 General Oceanography (3)

Prerequisite: Geological Sciences 101, Geological Sciences 101L and upper division standing. The chemical, physical and geological nature of the oceans. (2 hours lecture, 3 hours laboratory, field trips)

335 General Hydrology (3)

Prerequisites: Geological Sciences 101; Mathematics 150A. Nature, occurrence, movement of surface and groundwater. Rainfall/runoff relation, floods, aquifer evaluation, and water quality investigation. (2 hours lecture, 3 hours laboratory, field trips)

340 General Meteorology (3)

Prerequisites: Geological Sciences 101; Mathematics 150A; Physics 225A, 225AL or 211A, 211AL. Atmospheric processes, composition and structure. Radiation, thermodynamics of moist air, precipitation mechanisms, atmospheric dynamics. Map analysis and use of thermodynamic diagrams.

355 Earth's Interior (3)

Prerequisites: Geological Sciences 101; Physics 225A, 225AL or 211A, 211AL; Chemistry 120A or equivalent. Geophysical, geochemical properties of mantle and core. Data collection techniques. Impact of internal processes on crustal/surface phenomena.

360 Structural Geology (4)

Prerequisites: Geological Sciences 303A, 303B, 380; Physics 225A, 225AL or 211A, 211AL. Faults, folds, mechanics of rock deformation, and elementary tectonics; solution of problems by geometric, trigonometric and stereographic analysis. (3 hours lecture, 3 hours laboratory, field trips)

375 Engineering Geology (3)

Prerequisites: Geological Sciences 380; Mathematics 150A; Physics 225A, 225AL or 211A, 211AL. Engineering properties of rocks and soils; exploration techniques; analysis of geological science principles applicable to engineering problems; report preparation and professional responsibility. (2 hours lecture, 3 hours laboratory, field trips)

376 Applied Geology (3)

Prerequisites: Mathematics 130, 135 or 150A; Geological Sciences 101 and one semester university-level physics recommended. Geology applied to engineering works. Earth materials, processes; site evaluation techniques; geologic hazard analysis; case histories. (2 hours lecture, 3 hours laboratory, field trips)

380 Geologic Field Techniques (4)

Prerequisites: Geological Sciences 201; English 101; trigonometry; Computer Science 103 or equivalent recommended. Brunton compass use, measurement of stratigraphic sections, principles of topographic maps and aerial photographs and use in geologic mapping, geologic map preparation, columnar sections, cross sections and technical reports. (2 hours lecture, 6 hours field, weekends)

404A Optical Mineralogy (3) (Formerly 400)

Prerequisites: Geological Sciences 303B; Physics 225C, 225CL or 211B, 211BL. Principles of optical crystallography. Optical identification of minerals. Examination of rocks in thin section. (1 hour lecture, 6 hours laboratory)

404B Petrography (3) (Formerly 404)

Prerequisite: Geological Sciences 303B, 321, and 404A. Composition, occurrence, and origin of igneous, sedimentary, and metamorphic rocks in microscopic study. (1 hour lecture, 6 hours laboratory) and how and to compose, tectonics of the worlds as of processing the state of the st

406 Geochemistry (3)

Prerequisites: Geological Sciences 303B and 321, Chemistry 120B, Mathematics 150B. Basic chemical and thermodynamic principles applied to the origin and alteration of igneous, sedimentary and metamorphic rocks and economic mineral deposits.

423 Advanced Sedimentology and Stratigraphy (3)

Prerequisites: Geological Sciences 303A and 321. Case histories from literature illustrate concepts, methods, and results in sedimentology/stratigraphy analysis. Field and lab work center around student research on actual problems; research to culminate in paper with professional format. (2 hours lecture, 3 hours laboratory, field trips)

436 Hydrogeology (3)

Prerequisites: Geological Sciences 335, 456, 360, or equivalent. Occurrence, movement and utilization of groundwater resources; geological, geophysical and hydrological methods for groundwater exploration and development. Well hydraulics and groundwater contamination. (2 hours lecture, 3 hours laboratory, field trips)

437 Water Quality Investigations and Control (3)

Prerequisites: Geological Sciences 335; Chemistry 120A, B. Methods in sampling strategy. Evaluation of chemical data for quantitative interpretation of water quality status and trends, surface and ground water. Techniques for graphic representation, water contamination source identification and control. (2 hours lecture, 3 hours laboratory and field trips)

#### 455 Earthquake Seismology (3)

Prerequisites: Physics 225A, 225AL or 211A,B, 211AL, 211BL; Geological Sciences 355 recommended. Earthquake measurement, characteristics and mechanisms. Magnitude, intensity, source locating. Prediction and prevention principles and techniques. Seismic risk. Current research directions. Southern California seismicity including case study. (3 hours lecture, field trips)

# 456 Introduction to Applied Geophysics (3) (Formerly 356)

Prerequisites: either Geological Sciences 201 and Mathematics 250A or Geological Sciences 360 and Mathematics 150B; Physics 225A, 225AL; Physics 225B, 225BL recommended. Seismic refraction, gravity, magnetic and electrical techniques and fundamentals as applied to determination of subsurface structure, groundwater and location of mineral resources. (2 hours lecture, 3 hours laboratory, field trips)

## 460 Regional Tectonics (3)

Prerequisite: Geological Sciences 360. Discussion of recent literature on plate tectonics, tectonics of the world's major orogenic belts, and tectonics of California. (3 hours lecture, Spring-recess field trip)

# 470 Environmental Geology & Planning (4) (Formerly 370)

Prerequisites: Geological Sciences 101, 101L or Geological Sciences 320; upper-division or graduate standing. Geologic processes, hazards, mineral and energy resources and their interaction with planning and environmental regulations. (3 hours lecture, 3 hours lab, field trips)

#### 471 Mineral Deposits (3)

Prerequisites: Geological Sciences 303B; Chemistry 120A, or equivalent. Processes of mineral deposit formation; classification, characterization, and distribution of metallic and nonmetallic mineral deposits. (2 hours lecture, 3 hours laboratory, field trips)

#### 481A Geology Field Camp I (3) (Formerly 481)

Prerequisites: Geological Sciences 303B, 321, 360, 380. Geologic field mapping, operating from a field camp under primitive conditions in an area of varying geologic complexity. Field report, map and cross-sections required one week after completion of field work. Instructional fee. (45 hours a week for three weeks during January or summer)

#### 481B Geology Field Camp II (3)

Prerequisites: Geological Sciences 481A or equivalent experience and consent of instructor. Advanced geologic mapping techniques in variety of geologic settings, operating from a field camp under primitive conditions. Field reports, maps and cross-sections required one week after completion of field work. Instructional fee. (45 hours a week for three weeks during Summer)

# 481C Hydrology Field Camp (3) (Formerly 435)

Prerequisites: Geological Sciences 335 and 481A. Geologic mapping and hydrologic mapping and techniques applied to integrated hydrogeologic model for selected areas. Field report(s), map(s), cross-sections required. Instructional fee. (45 hours per week for three weeks during summer)

# 493 Directed Studies (1-4)

Prerequisites: upper-division standing and consent of instructor. Directed studies in specialized areas of the geological sciences, such as petroleum geology, sedimentology, optical and instrumentation techniques. Library research and written reports required. May be repeated once with different topic.

## 495 Geological Sciences Internship (3)

Prerequisite: junior or senior standing in geological sciences. Geological sciences work experience, salaried or volunteer, with industry, government or private agencies. Student intern will be supervised by faculty adviser and employer. (1 hour of seminar plus a total of 120-150 hours of work experience)

#### 496L Geological Sciences Tutorial (2)

Prerequisite: 20 units in geological sciences. Supervised experience in geological sciences teaching through tutoring or assisting in laboratory or field classes.

#### 498 Senior Thesis (1-2)

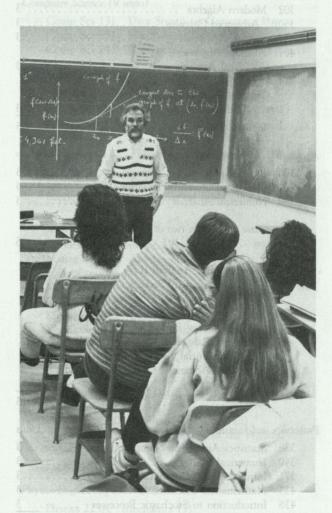
Prerequisite: senior standing in geological sciences. Developed as an extension of an advanced course, conducted independently by the student under faculty supervision, culminating in a paper of professional quality. Two units maximum credit permitted.

#### 499L Independent Study (1-3)

Independent study of a topic selected in consultation with and completed under the supervision of the instructor. May be repeated for credit.

#### 506T Topics in Geochemistry (3)

Prerequisite: Geological Sciences 303B; Chemistry 120B; consent of instructor. Special topics in geochemistry with emphasis on current investigations, specifically including isotope, organic, and contaminant. May be repeated for credit with different topic.



Physics 225C. Modern Physics hald areboM = 108

# Department of **Mathematics**

Vice Chair: Gerald Gannon Department Office: McCarthy Hall 154

#### Programs Offered

#### Bachelor of Arts in Mathematics

Pure Mathematics Concentration Applied Mathematics Concentration RAMO ROLLING Probability and Statistics Concentration Teaching Mathematics Concentration

### Minor in Mathematics

Minor in Mathematics for Teacher Education

## Master of Arts in Mathematics

Teaching Option Applied Mathematics Option

Waiver Program for the Single Subject Credential

#### Faculty

Russell Benson, Martin Bonsangue, Michael Clapp, Paul De Land, Harriet Edwards, Russell Egbert, James Friel, Gerald Gannon, William Gearhart, Richard Gilbert, Stephen Goode, Theodore Hromadka, Darryl Katz, Vuryl Klassen, Vyron Klassen, William Leonard, Gerald Marley, Mario Martelli, John Mathews, Karen Messer, Ronald Miller, David Pagni, John Pierce, Maijian Qian, Steven Roman, Harris Shultz, Ernie Solheid, Gisela Spieler, Edsel Stiel, Lawrence Weill, Yun-Cheng Zee

#### INTRODUCTION

The Department of Mathematics offers a standard undergraduate major program in mathematics with concentrations in pure mathematics, applied mathematics, probability and statistics, and teaching mathematics. Courses are provided to satisfy the needs of:

- 1. The student planning graduate study in mathematics;
- 2. The student planning to use mathematics in a career in business, industry or government;
- 3. The student planning to teach at the elementary or secondary
- 4. The student majoring in a discipline using mathematics as a descriptive or analytic tool.

The major program is designed to give sufficient breadth and depth in the study of mathematics to prepare students for subsequent graduate study in mathematics or related areas. The applied and the probability and statistics options provide the mathematics needed for certain careers in industry and government. For students interested in teaching in elementary or secondary schools, the teaching option may be combined with programs leading to a teaching credential to meet both university degree requirements and California credential law.

#### Credential Information

The waiver program for the single subject credential has been approved by the State of California for the Department of Mathematics. In addition to the courses in the teaching option, Computer Sci 131 or 231 is required.

#### BACHELOR OF ARTS IN MATHEMATICS

In addition to the units in mathematics required in each program, all students seeking a B.A. in Mathematics are expected to be skilled in elementary computer programming. Students may choose from Engineering 205 Digital Computation, Computer Science 112 Introduction to Computer Science, Computer Science 121 Programming Concepts, or Computer Science 123 Programming Concepts Review. This requirement should be completed prior to junior standing. Each student is also required to select one of five cognates from the disciplines of computer science, economics, management science, philosophy or physics/engineering. Those students selecting the computer science cognate are required to take Computer Science 121 or 123. Each course required for the major must be completed with a grade of C or better. Courses required for the major may not be taken on a credit/no credit basis and are not subject to challenge examinations.

Mathematics majors should take the lower-division mathematics courses (150A,B, 250A,B) during their first two years. Advanced calculus (350A) should be completed before the senior year. Mathematics 150A may be used to satisfy general education.

The requirements for the Bachelor of Arts in Mathematics consists of a total of 45 units in mathematics plus an additional 9-12 units in a cognate area of interest. The 45 units of mathematics is divided into a 30 unit core requirement which must be completed by all majors and an additional 15 unit requirement which is to be used to complete one of four possible concentrations; i.e., Pure Mathematics, Applied Mathematics, Probability and Statistics or Teaching Mathematics. The requirements for the B.A. in Mathematics are as follows:

#### Core Requirements (30 units)

All students are to complete the following 30 units:

Units
150A,B Analytic Geometry and Calculus 8
250A,B Intermediate Calculus 8
280 Strategies of Proof
307 Linear Algebra 3
335 Mathematical Probability
350A Advanced Calculus
370 Mathematical Model Building 3
Total

#### Additional Requirements (15 units)

Each student is required to complete one of the following four sets of requirements:

The state of the s	
Pure Mathematics Concentration	Units
302 Modern Algebra	3
350B Advanced Calculus	3
412 Complex Analysis	
407 Abstract Algebra,	
or 455 Real Analysis	3
414 Topology,	
or 417 Foundations of Geometry,	
or 425 Differential Geometry	
Total	15
Applied Mathematics Concentration	Units
306 Applied Analysis I	3
310 Ordinary Differential Equations	
340 Numerical Analysis	
	1 100
One course each from two of the following	
groups	6
a. 406 Applied Analysis II	
b. 435 Mathematical Statistics,	
or 438 Stochastic Processes	
c. 440 Numerical Solutions of Partial	
Differential Equations,	
or 445 Advanced Numerical Analysis	
d. 425 Differential Geometry,	
or 470 Advanced Mathematical Model	
Building	1 200
Total	15
Probability and Statistics Concentration	Units
338 Statistics Applied to Natural Sciences	3
340 Numerical Analysis	
371 Introduction to Combinatorics	3
435 Mathematical Statistics	3
438 Introduction to Stochastic Processes	3
Total	15
and consumers. May be repeated for coefficient different	
Teaching Mathematics Concentration	Units
302 Modern Algebra	3
401 Algebra and Probability for the	
Secondary Teacher	3
402 Logic and Geometry for the	
Secondary Teacher	3
414 Topology	
or 417 Foundations of Geometry	
435 Mathematical Statistics	3
or 438 Introduction to Stochastic Processes,	
or 470 Advanced Mathematical Model Building	g . 3
Total	

#### Cognates (9-12 units)

Each student is required to complete one of the following cognate requirements:

# Computer Science (9 units)

Comp Sci 131 Data Structures Concepts (3)

Comp Sci 231 File System Concepts (3)

Comp Sci 245 Computer Logic and Architecture (3)

#### Economics (11-12 units)

Economics 201 Principles of Microeconomics (3)

Economics 202 Principles of Macroeconomics (3)

Principles of Economics (5) Economics 210

then

Economics 440 Econometrics (3)

Economics 441 Mathematical Economics (3)

#### Management Science (9 units)

Three courses from the following:

Manag Sci 422 Surveys and Sampling Design and

Applications (3)

Manag Sci 448 Computer Simulation in Business and

Economics (3)

Manag Sci 467 Statistical Quality Control (3)

Manag Sci 473 Applied Statistical Forecasting (3)

#### Philosophy (9 units)

Math 368 Symbolic Logic, 1st course\* (3)

Math 369 Symbolic Logic, 2nd course\* (3)

and one of

Philosophy 380 Analytic Philosophy (3)

or Philosophy 384 Philosophy of the Physical Sciences (3)

\* Same as Philosophy 368/369.

#### Physics/Engineering (11 units)

Physics 225A Mechanics (3)

Physics 225AL Mechanics Lab (1)

Physics 225B Electricity and Magnetism (3)

Physics 225BL Electricity and Magnetism Lab (1)

Physics 225C Modern Physics (3)

or Engineering 201 Statics (3)

# Internships in Mathematics

Internships in applied mathematics provide work experience in advanced mathematics through positions in business, industry or For students planning to take Mathematics . Insmirrayog

#### Writing Requirement

Math 380 will satisfy the university's upper-division writing requirement for mathematics majors.

#### MINOR IN MATHEMATICS

A mathematics minor shall consist of 25 units of course work which shall include Math 150A, B, 250A, B and at least nine units of upper division mathematics, exclusive of Math 303A,B, 380, 401, 402, 495, 496 and 499. All courses must be completed with a grade of C or better.

#### MINOR IN MATHEMATICS FOR TEACHER **EDUCATION**

- A. For elementary education the minor consists of 20 units of course work selected from the courses offered by the Department of Mathematics. The courses must include Mathematics 150B or 338, and Mathematics 303A, B. All courses must be completed with a grade of C or better.
- For secondary education the minor consists of 22 units of course work selected from the courses offered by the Department of Mathematics. The courses must include Mathematics 250B and six units of upper-division courses in mathematics. All courses must be completed with a grade of C or better.

#### Required Course Work for Teaching Credentials

Candidates for the single subject credential must complete the following courses: Mathematics 401 and 402 and Mathematics Education 442 and 449 E,I,S.

#### MASTER OF ARTS IN MATHEMATICS

The M.A. in Mathematics is designed to provide advanced study for students interested in continuing studies for a Ph.D. in mathematics or mathematics education, high school and community college teaching or mathematical analysis in industry.

#### Prerequisites

An applicant must meet the university requirements for admission in conditionally classified graduate standing: a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted and be in good standing at the last college attended (see section of this catalog on Graduate Admissions for complete statement and procedures). In addition, students must have an undergraduate major in mathematics or a combination of previous course work and work experience approved as equivalent by the graduate committee of the Mathematics Department.

Applicants who meet the requirements for conditionally classified graduate standing may be granted classified graduate standing upon meeting the following requirements: a grade-point average of at least 3.0 in all upper-division mathematics courses; the completion of undergraduate courses equivalent to one semester each of linear algebra, modern algebra and advanced calculus (students in the Applied Mathematics Option complete one semester of mathematical probability and one semester of advanced calculus with grades of B or better); the development of a study plan approved by an adviser and the graduate committee; and

completion of the University Writing Requirement. Students with subject or grade deficiencies who have been admitted to conditionally classified standing must complete all courses required by the graduate committee with at least a 3.0 average before they will be classified. In addition, students in the teaching option should have completed a minimum of one year of fulltime teaching in junior high or senior high mathematics.

#### Regular Program

For this program a plan of study leading to a Master of Arts in Mathematics may be designed to provide advanced work in mathematics. A personalized study plan to meet the objectives of each student may be developed within the general framework of the degree requirements.

The program requires a study plan with a minimum of 30 units of coursework, planned by the student and the student's adviser, and approved by the graduate committee of the Mathematics Department. At least 16 of these units must be 500-level mathematics courses. No 300-level course work is applicable to the master's degree. Each three unit 500-level course must be accompanied by one unit of Mathematics 599 Independent Graduate Research. These 500-level courses should not come from any single area of mathematics. In addition, at least two from the following must be completed: Mathematics 407 Abstract Algebra, Mathematics 412 Complex Analysis, Mathematics 414 Topology, Mathematics 417 Foundations of Geometry, Mathematics 425 Differential Geometry, Mathematics 455 Real Analysis. Students will also be required to pass a set of four comprehensive exams or complete a six-unit project.

#### **Teaching Option**

This option, designed for mathematics teachers, requires 30 units of graduate study approved by the graduate committee. At least sixteen of these units must be 500-level mathematics courses. The following course work must be included: Mathematics 581 Geometry for Teachers, Mathematics 582 Algebra for Teachers, Mathematics 584 Analysis for Teachers, Mathematics 586 Finite Mathematics for Teachers, Mathematics 587 Problem Solving for Teachers, and from three to six units of Mathematics 599. Each student will be required to take electives to ensure competence in algebra, geometry and analysis and pass a set of four comprehensive exams.

#### Applied Mathematics Option

For those interested in applied mathematics, the Department of Mathematics, offers the following courses in applied mathematics: Mathematics 489A, B Applicable Analysis and Linear Analysis; Mathematics 501A, B Numerical Analysis and Computation, Mathematics 502A, B Probability and Statistics, Mathematics 503A, B Mathematical Modeling I and II, Mathematics 504A, B Simulation Modeling and Analysis. These courses were developed in consultation with mathematicians and scientists in the local industrial community and are specifically intended for individuals who are seeking positions, or who currently hold positions, which involve mathematics or quantitative applications. The subject matter emphasizes modern practical applied mathematics, modeling, problem solving and computation. The culminating experience is a project in which students have the opportunity of working in teams on a real problem, contracted and paid for by a local industrial firm. All classes are scheduled in the evening and can be taken in sequence in two calendar years, summers included.

#### Additional Information

A limited number of part-time instructor and research assistantships are available for selected graduate students. For more information, contact the Department of Mathematics.

# **Mathematics Courses**

#### 110 Mathematics for Liberal Arts Students (3)

Prerequisites: passing score on the ELM or exemption; three years of high school mathematics, including two years of algebra and one year of geometry. Survey of traditional and contemporary topics in mathematics, such as elementary logic, counting techniques, probability, graph theory, codes and coding, and the mathematics of the social sciences. For non-science majors.

#### 115 College Algebra (4)

Prerequisites: passing score on the ELM or exemption; three years of high school mathematics, including two years of algebra and one year of geometry, and a passing score on in-class qualifying exam. For students planning to take Mathematics 120 or Mathematics 130/135. Review of basic algebraic topics and treatment of functions, polynomials, logarithms, systems of equations and matrices. Credit given for either Mathematics 115 or Mathematics 125, but not both.

#### 120 Introduction to Probability and Statistics (3)

Prerequisites: passing score on the ELM or exemption; three years of high school mathematics, including two years of algebra and one year of geometry. Set algebra, finite probability models, sampling, binomial trials, conditional probability and expectation. Recommended for students of economics, business, the biological, geological and social sciences.

#### 125 Precalculus (4)

Prerequisites: passing score on the ELM or exemption; three years of high school mathematics, including two years of algebra and one year of geometry, and a passing score on in-class qualifying exam. For students planning to take Mathematics 150A. Functional approach to polynomial, rational, exponential, logarithmic and trigonometric concepts; conic sections and induction. Credit given for either Mathematics 115 or Mathematics 125, but not both. (CAN MATH 16)

#### 125W Precalculus Workshop (1)

Corequisite: Mathematics 125 and consent of instructor. Supplementary problem-solving workshop in a collegial setting. (3 hours workshop)

#### 130 A Short Course in Calculus (4)

Prerequisites: passing score on the ELM or exemption; three years of high school mathematics, including two years of algebra and one year of geometry, and a passing score on the Mathematics Qualifying Exam (MQE). Differential and integral calculus. For students of business, economics, the biological, and social sciences. No graduation credit if taken after successfully completing Math 150A. No graduation credit for both Mathematics 130 and 135. (CAN MATH 30)

#### 135 Business Calculus (3)

Prerequisites: passing score on the ELM or exemption; three years of high school mathematics, including two years of algebra and one year of geometry, and a passing score on the Mathematics Qualifying Exam (MQE). Elements of differential and integral calculus and their applications; including derivatives, integrals and max-min problems. Designed for students of business. No graduation credit if taken after successfully completing Mathematics 150A. No graduation credit for both Mathematics 130 and 135. (CAN MATH 34)

#### 150A,B Analytic Geometry and Calculus (4,4)

Prerequisites: passing score on the ELM or exemption; four years of high school mathematics, including trigonometry, and a passing score on the Mathematics Qualifying Exam (MQE). Math 150A is the only prerequisite for Math 150B. Analytic geometry, functions, limits, differentiation, the definite integral, techniques of integration, applications. At most 6 units of credit are given for Mathematics 130 or Mathematics 135 if taken before Mathematics 150A. (150A = CAN MATH 18, 150B = CAN MATH 20)

## 150AW Calculus I Workshop (1) I see lan A beiligi A 2014

Corequisite: Mathematics 150A and consent of instructor. Supplementary problem-solving in a collegial setting. (3 hours workshop)

#### 150BW Calculus II Workshop (1)

Corequisite: Mathematics 150B and consent of instructor. Supplementary problem-solving in a collegial setting. (3 hours workshop)

### 196 Student-to-Student Tutorials (1-3)

Consult "student-to-student tutorials" in this catalog for more complete course description. May be taken CR/NC only.

#### 250A Intermediate Calculus (4)

Prerequisites: Mathematics 150A, B or equivalent. A continuation of Math 150. Infinite series, Taylor's theorem, functions of several variables, partial differentiation, multiple integration. (CAN MATH 22)

#### 250AL Intermediate Calculus: Computer Laboratory (1)

Corequisite: Mathematics 250A. Use of computer software to solve calculus problems. (3 hours laboratory)

#### 250B Introduction to Linear Algebra and Differential Equations (4)

Prerequisites: Math 250A. An introduction to the solutions of ordinary differential equations and their relationship to linear algebra. Topics include matrix algebra, systems of linear equations, vector spaces, linear independence, linear transformations and eigenvalues.

### 270A Mathematical Structures I (3)

Prerequisite: Four years of high school mathematics. First of two semesters of fundamental discrete mathematical concepts and techniques needed in computer-related disciplines. Logic, truth tables, elementary set theory, proof techniques, combinatorics.

#### 270B Mathematical Structures II (3)

Prerequisite: Mathematics 270A. Second of two semesters of fundamental discrete mathematical concepts and techniques needed in computer-related disciplines. Graph theory, Boolean algebra, algebraic structures, linear algebra.

#### 280 Strategies of Proof (2)

Prerequisite: Mathematics 150B. Logic, set theory, and methods for constructing proofs of mathematical statements. A bridge to the rigors of upper-division mathematics courses containing significant abstract content.

#### 302 Modern Algebra (3)

Prerequisite: Mathematics 250B. The integers, rational numbers, real and complex numbers, polynomial domains, introduction to groups, rings, integral domains and fields.

#### 303A,B Fundamental Concepts of Elementary Mathematics (3,3)

Prerequisite: Completion of a mathematics course that satisfies the General Education requirement. Grade of C or better in Mathematics 303A is prerequisite for Mathematics 303B. Structure and form of the mathematics that constitutes the core of the K-8 mathematics curriculum, including the real number system, number theory and equations.

#### 306 Applied Analysis I (3)

Prerequisite: Mathematics 250B. Vector analysis, including Green's, Gauss' and Stokes' theorems. Introduction to complex analysis applications.

#### 307 Linear Algebra (3)

Prerequisite: Mathematics 250B. Introduction to the theory of vector spaces. Linear equations and matrices, determinants, linear transformations and eigenvalues, norms and inner products.

#### 310 Ordinary Differential Equations (3)

Prerequisite: Mathematics 250B. Theory and methods of solutions for ordinary differential equations, including Laplace transform methods and power series methods. Oscillation theory for second order linear differential equations and/or theory for systems of linear and nonlinear differential equations.

#### 330 Number Theory (3)

Prerequisite: Mathematics 250B. Divisibility, congruences, prime number theory, Diophantine problems.

#### 335 Mathematical Probability (3)

Prerequisite: Mathematics 250A. Probability theory; discrete, continuous, and multivariate probability distributions, independence, conditional probability distribution, expectation, moment generating functions, functions of random variables, central limit theorem.

#### 338 Statistics Applied to Natural Sciences (3)

Prerequisite: Mathematics 130 or 150B or consent of instructor. An introduction to the theory of statistics and statistical applications with an emphasis on data analysis techniques. Topics include elementary probability theory, estimation, hypothesis testing, correlation and regression, analysis of variance, and nonparametric tests.

#### 340 Numerical Analysis (3)

Prerequisites: Mathematics 250B and one of the following: Engineering 205, Computer Science 112, 121, 123 or equivalent. Approximate numerical solutions of systems of linear and nonlinear equations, interpolation theory, numerical differentiation and integration, numerical solution of ordinary differential equations. Computer coding of numerical methods.

#### 350A,B Advanced Calculus (3,3)

Prerequisite: Mathematics 250B. 350A is a prerequisite for 350B. Proofs in analysis. Continuity, differentiation and integration of functions of several variables, improper integrals, sequences and infinite series.

# 368 First Course in Symbolic Logic (3)

(Same as Philosophy 368)

## 369 Second Course in Symbolic Logic (3) nbolic Logic (3)

(Same as Philosophy 369)

### 370 Mathematical Model Building (3)

Prerequisite: Mathematics 250B or consent of instructor and one of the following: Engineering 205, Computer Science 112, 121, 123 or equivalent. The theory of mathematical models and their applications in the biological, physical and social sciences. Discrete and continuous models.

#### 371 Introduction to Combinatorics (3)

Prerequisites: Mathematics 250A or Mathematics 270B. Analysis of discrete structures and relations; proofs of existence and methods of enumeration. Permutations and combinations, the binomial coefficients, the inclusion-exclusion principle, recurrence relations, generating functions, systems of distinct representatives and the marriage theorem, and combinatorial designs. (Same as Computer Science 371)

#### 375 Discrete Dynamical Systems and Chaos (3)

Prerequisites: Mathematics 250B or consent of instructor. Analysis of the evolution of linear and nonlinear deterministic discrete systems with emphasis on long range behavior, stability and instability of stationary states and periodic orbits, chaotic orbits, strange attractors, fractional dimension and lyapunov exponents; examples from current research literature.

### 380 History of Mathematics (3)

Prerequisite: Mathematics 250B. The history of mathematics through its methods and concepts. Designed to help the student become proficient in writing and reading mathematical literature. Satisfies the upper-division writing requirement for mathematics majors.

#### 401 Algebra and Probability for the Secondary Teacher (3)

Prerequisite: 12 units of upper-division mathematics. Overview of mathematical topics relevant to the teacher of secondary mathematics. Problem-solving approach to areas including algebra, number theory, combinatorics and probability while maintaining an historical perspective.

#### 402 Logic and Geometry for the Secondary Teacher (3)

Prerequisite: 12 units of upper-division mathematics. A course parallel to Mathematics 401 but with emphasis on geometry, trigonometry and the theory of equations.

#### 406 Applied Analysis II (3)

Prerequisite: Mathematics 306. Partial differential equations. Fourier analysis and integral transforms. Boundary-value problems for the potential, wave and diffusion equations. Sturm-Liouville theory. Applications.

### 407 Abstract Algebra (3)

Prerequisite: Mathematics 302. Sets, mappings, groups, rings, modules, fields, homomorphisms, advanced topics in vector spaces and theory of linear transformations, matrices, algebras, ideals, field theory, Galois theory.

#### 412 Complex Analysis (3)

Prerequisite: Mathematics 350A. Complex differentiation and integration, Cauchy's theorem and integral formulas, maximum modulus theorem, harmonic functions, Laurent series, analytic continuation, entire and meromorphic functions, conformal transformations and special functions.

414 Topology (3)

Prerequisite: Mathematics 350A. Topological spaces and continuous functions, connectedness and compactness, metric spaces and function spaces.

#### 417 Foundations of Geometry (3)

Prerequisite: Mathematics 307. A study of the foundations of Euclidean and non-Euclidean geometries through transformations and formal axiomatics.

#### 425 Differential Geometry (3)

Prerequisite: Mathematics 307. The differential geometry of curves and surfaces. Frenet-Seret formulas, the Gauss-Weingarten equations, the Gauss-Bonnet theorem.

#### 435 Mathematical Statistics (3)

Prerequisite: Mathematics 335 or equivalent. Statistical theory and its applications, based on the use of calculus.

#### 438 Introduction to Stochastic Processes (3)

Prerequisite: Mathematics 335. Stochastic processes including Markov chains, the Poisson Process, the Wiener Process. Applications to birth and death processes and queuing theory.

#### 440 Numerical Solutions of Differential Equations (3)

Prerequisite: Mathematics 340. Numerical methods for initial and boundary-value problems for ordinary and partial differential equations, using finite difference methods. Error analysis. Computer coding of numerical methods.

#### 445 Advanced Numerical Analysis (3)

Prerequisite: Mathematics 340. Numerical linear algebra topics including iterative methods for linear systems and approximation of eigenvalues and eigenvectors. Approximation theory, optimization, error analysis, computer coding of numerical methods.

#### 455 Real Analysis (3)

Prerequisite: Mathematics 350B. Metric spaces, continuity, uniform convergence, lebesque measure and integration.

#### 470 Advanced Mathematical Model Building (3)

Prerequisite: Mathematics 370. A continuation of Mathematics 370. Discrete, continuous and stochastic models utilizing methods from applied mathematics. A project suitable to the student's background and interest may be required.

#### 489A Applicable Linear Algebra (3)

Prerequisites: undergraduate calculus, linear algebra, advanced calculus and consent of instructor. Topics from linear algebra useful in graduate studies in applied mathematics. Finite and infinite dimensional vector spaces, linear transformations and matrices. An introduction to Hilbert spaces. The projection theorem and some of its applications. Must be taken concurrently with Math 489B.

# 489B Applicable Analysis (3)

Prerequisites: undergraduate calculus, linear algebra, advanced calculus and consent of instructor. Topics from analysis useful in graduate studies in applied mathematics. Topics may include initial and boundary value problems, including series solutions, eigenvalues and eigenfunctions, Fourier analysis, generalized functions, an introduction to the calculus of variations, and transform methods. Must be taken concurrently with Math Prerequisites Mathematics 489A. B. on consert of instruct A884

# 491 Career Options in Mathematics (1)

Prerequisite: Upper division standing in Mathematics. Career options in mathematics. Credit/No Credit.

#### 495 Internship in Applied Mathematics (1-3)

Prerequisites: 15 units of upper-division mathematics and consent of instructor. Work experience in advanced mathematics through positions in business, industry or government.

#### 496 Student-to-Student Tutorials (1-3)

Consult "student-to-student tutorials" in this catalog for more complete course description. May be taken CR/NC only.

### 499 Independent Study (1-3)

Prerequisite: consent of instructor. Special topic in mathematics, selected in consultation with and completed under supervision of instructor, asked similation nortalizate or normalized at bon

#### 501A Numerical Analysis and Computation I (3)

Prerequisites: Mathematics 489A, B or consent of instructor. Numerical methods for linear and nonlinear systems of equations, eigenvalue problems. Interpolation and approximation, spline functions, numerical differentiation, integration and function evaluation. Error analysis, comparison, limitations of algorithms. Must be taken concurrently with Mathematics 501B.

#### 501B Numerical Analysis and Computation II (3)

Prerequisites: Mathematics 489A, B or consent of instructor. Numerical methods for initial and boundary-value problems for ordinary and partial differential equations. The finite element method. Error analysis, comparison, limitations of algorithms. Must be taken concurrently with Mathematics 501A.

## 502A Probability and Statistics I (3)

Prerequisites: Mathematics 335 and 489A, B. Theory and applications of probability models including univariate and multivariate distributions; expectations and transformations of random variables. Training to Institute on ACE softeness and sent appeared

# 502B Probability and Statistics II (3)

Prerequisites: Mathematics 502A. Theory and applications of sampling theory, statistical estimation, and hypothesis testing.

## 503A Mathematical Modeling I (3)

Prerequisites: Mathematics 489A,B or consent of instructor. Mathematical modeling concepts. Topics may include: dimensional analysis, scaling, and sensitivity; system concepts, state space, observability, controllability, and feedback; dynamical systems, models and stability analysis; optimization models.

### 503B Mathematical Modeling II (3)

Prerequisites: Mathematics 489A,B or consent of instructor. Development and analysis of mathematical models in such areas as mechanics, economic planning, operations management, environmental and ecological sciences, biology and medicine. The course includes a project, with students working in a team setting.

#### 504A Simulation Modeling and Analysis (3)

Prerequisites: Mathematics 501A,B; 502A,B; 503A,B; and consent of instructor. Advanced techniques of simulation modeling, including the design of Monte Carlo, discrete event, and continuous simulations. Topics will include output data analysis, comparing alternative system configurations, variance-reduction techniques, and experimental design and optimization. Must be taken concurrently with Mathematics 504B.

#### 504B Applications of Simulating Modeling Techniques (3)

Prerequisites: Mathematics 501A,B; 502A,B; 503A,B; and consent of instructor. Introduction to a modern simulation language, and its application to simulation modeling. Topics will include development of computer models to demonstrate the techniques of simulation modeling, model verification, model validation, and methods of error analysis. Must be taken concurrently with Mathematics 504A.

## 581 Geometry for Teachers (3)

Prerequisites: Mathematics 307 or consent of instructor, graduate standing, plus one year of full-time teaching in secondary school mathematics. Topics relating to the high school curriculum from an advanced standpoint including the axiomatic method and non-Euclidean geometry.

### 582 Algebra for Teachers (3)

Prerequisites: Mathematics 302, or consent of instructor, graduate standing, plus one year of full-time teaching in secondary school mathematics. Topics relating to the high school curriculum from an advanced standpoint including algorithms, fields and polynomials.

### 584 Analysis for Teachers (3)

Prerequisites: Mathematics 350A or consent of instructor, graduate standing, plus one year of full-time teaching in secondary school mathematics. Topics relating to the high school curriculum from an advanced standpoint including limits, continuity, differentiation and integration.

#### 586 Finite Mathematics for Teachers (3)

Prerequisites: Mathematics 335 or consent of instructor; one of the following: EG-GN 205, Computer Science 112, 121, 123 or equivalent; graduate standing and one year of full time teaching in secondary school mathematics. Topics relating to the high school curriculum from an advanced standpoint including combinatorics, probability, matrices, and linear programming.

# 587 Problem Solving for Teachers (3)

Prerequisites: Math 302 or consent of instructor, graduate standing, plus one year of full-time teaching in secondary school mathematics. Problem solving via non-routine and enrichment-type problems from several branches of mathematics.

#### 597 Project (3)

Prerequisite: consent of instructor. May be repeated for credit. Students in the Applied Master's Program earn a total of 6 units.

#### 599 Independent Graduate Research (1-3)

Prerequisite: graduate standing. One unit required for each regular graduate course. Also offered without being attached to any course. May be repeated for credit.

# **Mathematics Education Courses**

#### 442 Teaching Mathematics in Secondary School (3)

Prerequisite: admission to Teacher Education Program in Mathematics or consent of instructor. Objectives, methods, and materials including audiovisual instruction for teaching mathematics. Required before student teaching, of mathematics majors for the general single subject credential. (Offered spring semester only) (2 hours lecture, 2 hours activity)

#### 449E Externship in Secondary Teaching (3)

See description under Department of Secondary Education. (Offered spring semester only)

#### 449I Internship in Secondary Teaching (10)

See description under Department of Secondary Education. (Offered fall semester only)

#### 449S Seminar in Secondary Teaching (2)

See description under Department of Secondary Education. (Offered fall semester only)

#### 499 Independent Study (1-3)

Prerequisite: consent of instructor. Special topic in mathematics education, selected in consultation with and completed under supervision of the instructor. May be repeated for credit.

# Department of Physics



Department Chair: Mark Shapiro Department Office: McCarthy Hall 611

Programs Offered Manager (10,14, 14 255 brings Bachelor of Science in Physics

Minor in Physics

Faculty

Roger Dittmann-Djakovic, James Feagin, Heidi Fearn, Kolf Javaweera, Murtadha Khakoo, Roger Nanes, Mark Shapiro, Louis Shen, Keith Wanser, Dorothy Woolum.

Physics 330 Electromagnetic Theory
Physics 340 Modern Physics) spinalsold

All programs: Roger Nanes

#### INTRODUCTION

Physics is the natural science that deals with the properties and interactions of matter and radiation. As such, physics provides the fundamental basis for all other sciences, and for applied science fields such as engineering and the health sciences. Many physicists engage in research designed to expand the frontiers of physical knowledge; others engage in the application of physics concepts in industry, and in private and government laboratories.

The physics major program can provide the education necessary for the student to continue studies at the graduate level that, in turn, lead to the master's and doctoral degrees. Alternatively, the physics major program can provide the education necessary for the student to work immediately upon graduation with the bachelor's degree, either in industry or government labs, in applied physics fields, or in teaching at the secondary school level.

Each student's study program is formalized in an approved study plan that provides the type of education that will best suit that student's needs upon graduation. The emphasis of the study plan is physical theory and mathematics for those planning on graduate school, while the emphasis is the more applied courses (such as physical electronics), including advanced laboratory work, for those planning to work in applied physics upon graduation.

The department's instrumentation and facilities include several real-time research computers with interfacing modules for instruction in modern automation and for automated faculty research projects. Students are encouraged to obtain research experience by assisting faculty in their ongoing research efforts. Physics 495, Internship in Physics, provides practical work experience that integrates classroom studies with the needs and methods of modern industrial science. Lower Division

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BACHELOR OF SCIENCE IN PHYSICS	
COURSE REQUIREMENTS	
Lower Division	Units
General Chemistry (Chem 120A,B) Mathematics (Math 150A,B and 250A) . Fundamental Physics (Physics 225A,B,C	
and 225AL,BL,CL)	<u>. 12</u>
Total	

At least 12 additional upper-division units in physics and 3 units of general electives in applied mathematics, science or the equivalent: selected in consultation with the department's academic adviser and the approval of the department chair. (For students completing a minor or second major in mathematics, in another science, in engineering, or in computer science, the upper-division requirement is 9 Total ...... 36

Survey of Mathematical Physics

Methods of Experimental Physics ..... 3

Physics 320 Classical Mechanics ..... 4 Physics 330 Electromagnetic Theory ...... 4 Physics 340 Modern Physics ..... 4

Physics 310 Thermodynamics, Kinetic Theory

Upper-Division Writing Requirement	Units
English 301 Advanced College Writing	physics major p the student to w
or English 360 Scientific and Technica Report Writing	

#### Other Requirements

Upper Division

Physics 300

Physics 380

Each course in physics, mathematics, chemistry and English that is required for the major must be completed with grade of C or better.

Formal academic advisement is required for all physics majors at least once every academic year.

Each physics major must file a plan of study with the Physics Department prior to the student's enrollment in upper-division physics courses. This plan must be approved by the department chair, anothe december one or their one or research efforts.

#### MINOR IN PHYSICS

ower Division	L	Inits
Fundamental Physics (Physics 225A, B, C		
and 225AL,BL,CL)		. 12

#### Upper Division

Upper-Division Experimental Physics	3
Additional upper-division units in physics, selected in	
consultation with the department academic adviser with	
approval by both the adviser and the department chair	6

#### TEACHING CREDENTIAL

To qualify for a waiver from the examination for a Single Subject Credential in Physical Science, the following courses are required in addition to those for the B.S. degree in Physics:

Chemistry 301A, B, 302L. Geological Sci 101, 101L, and 201. Physics 200. Biological Sci 131, and 241 or 261.

# **Physics Courses**

A grade of C or better is required in all prerequisite courses. Prerequisite requirements with exception of the grade requirement may be waived by the instructor of the course if the instructor is satisfied that the student is qualified to undertake the course.

101 Survey of Astronomy and Physics (3) (Formerly 123) Basic concepts of astronomy and physics. Applications to the evolution of the universe, development of the solar system, and contemporary topics including lasers, space exploration, and energy. For non-science majors.

#### 101L Survey of Astronomy and Physics Laboratory (1) (Formerly 123L)

Concurrent enrollment in Physics 101 required. Experiments that demonstrate important concepts in astronomy and physics. For non-science majors. Instructional fee.

#### 107 Nuclear Energy and Its Impact on Society (1)

Physics of nuclear technology. Its social costs, political economy, historical development.

#### 115 Introductory Physics (4)

Prerequisites: High school algebra, geometry, and intermediate algebra. Development of problem solving skills in basic physics. For students with limited background in physics who plan to take additional physics courses. Does not fulfill physics requirements for majors or minors in the physical or biological sciences. (3 hours lecture, 1 hour recitation)

#### 200 Introduction to Astronomy (4)

High school algebra recommended. Celestial motion, the solar system, galactic structure, theories of the origin of the universe and the solar system. (3 hours lecture, 1 hour of activity, field trips to planetariums and/or observatories and observing sessions).

#### 211A Elementary Physics (3)

Corequisite: Mathematics 130 or 150A, Physics 211AL. An introduction to mechanics and thermodynamics. Designed for life and health science majors. (2 hours lecture, 1 hour recitation). (211A & 211AL: CAN PHYS 2)

#### 211B Elementary Physics (3)

Prerequisite: 211A with a grade of C of better. Corequisite: Physics 211BL. An introduction to electricity and magnetism, wave motion and optics. Designed for life and health science majors. (2 hours lecture, 1 hour recitation). (211B & 211BL: CAN PHYS 4)

#### 211AL, 211BL Elementary Physics: Laboratory (1,1)

Laboratory for 211A,B. Concurrent enrollment in the corresponding 211A,B lecture required. (3 hours laboratory). (Instructional materials fee.) (211A & 211AL: CAN PHYS 2; 211B & 211BL: CAN PHYS 4)

#### 225A Fundamental Physics: Mechanics (3)

Prerequisite: Mathematics 150A. Concurrent enrollment in 225AL required. Classical Newtonian mechanics; linear and circular motion; energy; linear/angular momentum; systems of particles; rigid body motion; wave motion and sound. (225A & 225AL: CAN PHYS 8)

#### 225B Fundamental Physics: Electricity and Magnetism (3)

Prerequisite: Mathematics 150B and Physics 225A or equivalent; concurrent enrollment in Physics 225BL required. Electrostatics, electric potential, capacitance, dielectrics, electrical circuits, resistance, emf, electromagnetic induction, magnetism and magnetic materials, and introduction to Maxwell's equations. (225B & 225BL: CAN PHYS 12)

# 225C Fundamental Physics: Waves, Optics, and Modern Physics (3 or 1)

Prerequisite: Physics 225B with a grade of C or better, or equivalent. Concurrent enrollment in Physics 225CL laboratory required except for Mechanical Engineering majors. Mechanical Engineering majors may enroll for 1 unit credit (optics component). All others must enroll for 3 units credit. Geometrical and physical optics, wave phenomena; quantum physics, including the photoelectric effect, line spectra and the Bohr atom; the wave nature of matter, Schroedinger's equation and solutions; the Uncertainty Principle, special theory of relativity.

#### 225AL,BL,CL Fundamental Physics: Laboratory (1,1,1)

Laboratory for Physics 225A,B,C. Concurrent enrollment in the corresponding 225A,B,C lecture required (3 hours laboratory). (Instructional materials fee.) (225A & 225AL: CAN PHYS 8; 225B & 225BL: CAN PHYS 12; 225C & 225CL: CAN PHYS 10)

#### 300 Survey of Mathematical Physics (3)

Prerequisite: Mathematics 250A. Survey of mathematical techniques required for upper division physics courses including differential vector operators, complex variables, partial and ordinary differential equations, special functions, Fourier transforms and series, matrices and operators, probability and statistics.

# 310 Thermodynamics, Kinetic Theory, and Statistical Physics (3)

Prerequisite: Physics 225C and Physics 300. Laws of thermodynamics with physical, chemical and engineering applications; kinetic theory of gases. Introduction to statistical physics with reexamination of laws of thermodynamics.

#### 315 Computational Physics (3)

Prerequisite: Physics 225C; previous computing experience recommended. Basic numerical methods in physics. Applications include curve fitting and minimization, numerical simulation of classical particles, waves and Fourier analysis, quantum square well, Monte Carlo methods and diffusion. Hands-on computing with high-level languages, graphics and symbolic mathematics. (1 hour lecture, 4 hours activity)

#### 320 Classical Mechanics (4)

Prerequisites: Physics 225C and Physics 300. Classical mechanics and associated mathematical and numerical techniques: Newtonian dynamics; Lagrangian and Hamiltonian dynamics.

#### 330 Electromagnetic Theory (4)

Prerequisites: Physics 225C and Physics 300. Applications of vector calculus and Maxwell's equations to the propagation of EM waves in dielectrics, plasmas, and conductors. Selected topics in radiation, diffraction, and eigenfunction expansions of static and waveguide fields.

## 340 Modern Physics (4)

Prerequisites: Physics 225C and Physics 300. A survey of modern physical theories, their experimental foundations and applications: special relativity; quantum physics of atoms, molecules, and nuclei; introduction to solid state physics.

#### 380 Methods of Experimental Physics (3)

Prerequisite: Physics 225B. Experiments using analog, digital, and integrated circuits including: filtering circuits, diodes, transistor amplifiers, operational amplifiers, triggers, and digital logic. Introduction to automated experimentation. (1 hour lecture, 6 hours laboratory). (Instructional materials fee.)

# 384 Philosophy of the Physical Sciences (3) (Same as Philosophy 384)

#### 410 Introduction to Mathematical Physics (3)

Prerequisite: Physics 225C and Physics 300. The ordinary and partial differential equations of physics. Vector calculus, linear algebra, calculus of variations, Fourier series and integral transforms. Problems in physics.

#### 411 Modern Optics (3)

Prerequisites: Physics 225C and Physics 300. Wave propagation, Fourier optics, introduction to spatial filtering and image enhancement, lasers, analytical ray tracing, matrix methods in optics.

#### 414 Physics of the Solar System (3)

Prerequisites: Physics 225C and Physics 300; Physics 310 recommended. Solar system physics, including physical principles underlying current experiments in planetary science and space physics. Solar physics; planetary dynamics; experimental probes of planetary surfaces, interiors and atmospheres; physical constraints on theories of the solar system origin.

#### 416 Thermal and Statistical Physics (3)

Prerequisites: Physics 225C and Physics 300. The disciplines of thermodynamics, statistical mechanics and kinetic theory (and their applications); their unifying microscopic foundation.

#### 454 Introduction to the Solid State of Matter (3)

Prerequisites: Physics 225C and Physics 300. The physical properties of matter in the solid state, as explained by atomic theory. Crystal structure, thermal, electric and magnetic properties of metals, semiconductors, band theory and solid state devices.

#### 455 Introduction to Quantum Physics (3)

Prerequisites: Physics 225C and Physics 300. The concepts and theory of quantum physics. Early quantum theories, the Schroedinger equation, eigenvalue equations, operators, commutation properties, applications to simple quantum systems, angular momentum.

#### 460T Advanced Topics in Contemporary Physics (3)

Prerequisite: Upper-division standing in physics and consent of instructor and department chair. An advanced lecture course covering a field of physics of current interest not covered in other courses, such as plasma physics, superconductivity, solid state devices, fiber optics and photonics, astrophysics, subatomic physics. May be repeated for credit with a different topic.

#### 465 Gravitation (3)

Prerequisites: Physics 225C and Physics 300. Introduction to differential geometry and tensor analysis needed to understand Einstein's General Theory of Relativity. Applications of general relativity to stars, gravitational collapse, black holes, gravitational waves, cosmology. Experimental tests/alternate theories of gravity.

#### 471 Electronic Circuit Theory (3)

Prerequisites: Physics 225C and Physics 300. Operating characteristics of transistors and semiconductor diodes. Linear circuit theory for alternating currents and for transient currents. Switching and pulse circuits. Digital electronics.

#### 473 Basic Instrumentation Concepts (3)

Prerequisite: Physics 225B. Modern instrumentation theory, techniques, and practices in the physical sciences. A systematic approach to physical measurement from transducer to data presentation.

#### 476 Atomic Structure (3)

Prerequisite: Physics 455. Theory of atomic structure, interaction of radiation with matter and perturbation theory. Angular momentum and coupling schemes.

#### 481 Experimental Physics (2)

Prerequisites: Physics 225C, Physics 380 recommended. Techniques and methods of experimental physics including: use of sensors, transducers, time series, power spectra, phase sensitive detection, computer interfacing and signal conditioning. Experiments cover several areas of physics. (1 hour lecture, 6 hours laboratory). Instructional materials fee.

#### 482 Modern Optics Laboratory (2)

Prerequisites: Physics 225C and Physics 300. Physics 380 and Physics 411 recommended. Experiments in optics, including: Fourier optics, holography, fiber optics, diffraction, interferometry, laser physics, light scattering, optical detection including photon counting and photographic techniques. (1 hour lecture, 6 hours laboratory). Instructional materials fee.

#### 495 Internship (1-3)

Prerequisites: upper-division standing in physics and consent of the chair. Professional physics work in industry or government, to provide an in-depth experience. Written report is required. May be repeated once for credit.

#### 496 Student-to-Student Tutorials (1-3)

Prerequisite: upper-division standing and consent of chair. Students learn through teaching, increase mastery of subject matter, develop awareness of teaching problems and competence in teaching techniques. Consult "Student-to-Student Tutorials" in this catalog for more complete course description.

# 499 Independent Study (1-3)

Prerequisite: approval of study plan by department chair and instructor. Topic in physics, selected in consultation with and completed under the supervision of the instructor. May be repeated for credit to a maximum of six units.

#### 598 Thesis (1-6)

Planning, preparation and completion of an acceptable thesis in partial fulfillment of the requirements for the master's degree. Credit to be obtained only upon formal submission of thesis.

#### 599 Independent Graduate Research (1-3)

Prerequisite: written approval of study plan by department committee and by instructor. Open only to graduate students and only with consent of a faculty member. May be repeated for credit.

# Science Education Program

Program Coordinator: H. Eric Streitberger Program Office: McCarthy Hall 580

Program Offered Master of Arts in Teaching Science

### Faculty

Gaylen Carlson, H. Eric Streitberger, Barry Thomas

#### Advisers

MAT-S: Gaylen Carlson Secondary Teaching Certification: Gaylen Carlson, H. Eric Streitberger, Barry Thomas

#### Introduction

Science Education is a specialized area of learning and instruction related to the pre-service and in-service education of science teachers.

The Science Education Program prepares students to teach science at the elementary and secondary levels; provides guidance for experienced teachers in the study and use of educational practices developed for the teaching of sciences; and helps teachers develop original ideas in their areas of specialization.

The offerings of this program include basic professional training courses required for teaching-certification in the physical and life sciences, advanced course work in science education, and certain academic content offerings designed especially for teacher prep-

The program teaches scientific content, scientific processes and curriculum for prospective and practicing elementary teachers. These courses are in the physical sciences and the biological sciences.

The program offers courses for prospective and practicing secondary teachers in the methods of teaching science and in the processes of science and is responsible for the supervision of teachers in student teaching assignments. The courses and experiences provide prospective secondary teachers with the skills necessary to teach the scientific content of their particular science certification.

#### Requirements for Teaching Credentials

The following courses offered by the Science Education Program are required of candidates for teaching credentials in science.

#### Single Subject Credential Candidates — Life Sciences and Physical Sciences

Science Ed 312 Processes of Science (3)

Science Ed 442 Teaching Science in the Secondary School (3)

Science Ed 449E Externship in Secondary Teaching (3) Science Ed 449I Internship in Secondary Teaching (10)

Science Ed 449S Seminar in Secondary Teaching (2)

The student should take Science Ed 442 concurrently with Science Ed 449E (5 weeks of student teaching at the end of the semester). Science Ed 449I (full-time student teaching) and Science Ed 449S are taken concurrently in the following semester. Science Ed 312 is a prerequisite for Science Ed 449I and must be included in the student's study plan. It can be taken concurrently with 449I with consent of the instructor.

#### Courses Approved for the Child Development and the Liberal Studies Waiver Programs

Selections from the following courses may be used to meet degree requirements for the Child Development major or the liberal studies major:

Science Ed 410 Physical Science Concepts (3) Science Ed 453 Life Science Concepts (3)

In recognition of the need for education in nature interpretation and conservation, the Science Education Program offers course work and internships in these disciplines. Much of this course work takes place at the Tucker Wildlife Sanctuary in the Santa Ana Mountains.

#### MASTER OF ARTS IN TEACHING SCIENCE

The primary objectives of the Master of Arts in Teaching -Science are to provide advanced course work in science curriculum designs appropriate to the professional responsibilities of science educators; to provide research and seminar opportunities in contemporary issues in science education; and to enable teachers to become more proficient in science disciplines appropriate to their academic teaching assignments.

Additional course work is selected from the departments of Biological Science, Chemistry and Biochemistry, Computer Science, Geological Sciences or Physics. The graduate work culminates with the student completing a project or thesis in an area of science education which is applicable to the student's teaching. Faculty from the program and other departments form the committee which guides and evaluates each graduate student.

#### Admission to Graduate Standing: Conditionally Classified

University requirements include a baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. For this program the baccalaureate must be in one of the sciences (biology, chemistry, geological sciences, physics) and/or related fields.

#### Graduate Standing: Classified

A student who meets the requirements for conditionally classified graduate standing, as well as the following requirements, may be granted classified standing upon the development of an approved study plan. Candidates:

- 1. must be science instructors or curriculum coordinators/ supervisors as evidenced by an appropriate credential certifying that they may teach in one of the science disciplines below the collegiate level;
- 2. must declare an area of teaching specialization (the graduate committee for all candidates will include instructors from the academic departments of the student's teaching specialty or emphasis);
- 3. may be asked to take a diagnostic examination prior to classification in the declared areas of teaching specialty (the purpose of this examination is to aid advisers in recommending appropriate science course work, if areas of weakness are apparent. Course work as designated by coadvisers will be required prior to taking more advanced course work. Such course work will not count toward the 30-unit degree requirement);
- 4. must have adequate science preparation; and
- 5. must have a minimum grade-point average of 2.5 in science prerequisites.

#### Study Plan

The degree program consists of 30 units of upper-division or graduate course work within the School of Natural Science and Mathematics, of which at least half must be 500-level, and which must be completed with a grade-point average of 3.0 or better.

- 1. 15 units will be in the sciences, in upper-division and graduate courses. At least nine units will be taken in one of the following: biology, chemistry, computer science, geological sciences or physics.
- 2. 15 units will be in science education with the following requirements:

#### Core courses

550 Theoretical Designs in Science Education (3)

552 Review of Research in Science Education (3)

(This course meets the Graduate Level Writing Requirement.)

554 Issues in Science Education (3)

#### Culminating Experience

598 Thesis (6)

or 597 Project (3)

and 599 Independent Graduate Research (3)

For further information and advisement, consult the graduate program adviser or coordinator of the Science Education Program.

# Science Education Courses

#### 312 Processes of Science (3)

Prerequisites: 15 units of science coursework including biological and physical sciences. Methodologies, logical procedures and explanatory systems that characterize the various natural sciences. The role of the science educator. (2 hours lecture, 1 hour activity, 1 hour TBA)

#### 410 Physical Science Concepts (3) (Formerly 310)

Prerequisite: completion of general education natural science requirements or consent of instructor. For elementary school teachers. Observing, classifying, recognizing space-time relations, measuring, inferring, formulating hypotheses, controlling variables and interpreting data. (2 hours lecture, 2 hours activity)

#### 442 Teaching Science in the Secondary School (3)

Prerequisite: appropriate education and science education course work for credential. Objectives, methods, and materials including audiovisual instruction for teaching science. Required before student teaching for candidates for the single subject teaching credential in either the life sciences or the physical sciences. (2 hours lecture, 2 hours activity)

#### 449E Externship in Secondary Teaching (3)

(See description under Secondary Education)

#### 449I Internship in Secondary Teaching (10)

Prerequisite: Science Education 312 (may be taken concurrently) (See description under Secondary Education)

#### 449S Seminar in Secondary Teaching (2)

(See description under Secondary Education)

#### 453 Life Science Concepts (3)

Prerequisite: completion of general education requirements or consent of instructor. Biological principles using science processes appropriate for elementary teachers. (2 hours lecture, 2 hours activity)

#### 495A,B Naturalist Internship (3,3)

Prerequisite: consent of instructor. Supervised in-service training at the Tucker Wildlife Sanctuary. For the prospective biological science teacher, communications major and others interested.

#### 499 Independent Study (1-3)

Special topics in science education, selected by consultation and completed under the supervision of the instructor. May be repeated for credit.

#### 550 Theoretical Designs in Science Education (3)

Prerequisites: graduate standing. The designs, models, assumptions of national curriculum projects in science at the secondary level. The successes and failures of these projects. (3 hours lecture)

#### 552 Review of Research in Science Education (3)

Prerequisites: graduate standing. A review of relevant literature requisite to individual research design and execution of appropriate experimental or observational procedures to test hypotheses concerning problems in science education. (3 hours lecture/discussion format; inquiry mode)

#### 554 Issues in Science Education (3)

Prerequisite: graduate standing. Major contemporary issues in science education. (3 hours lecture)

#### 597 Project (3)

Prerequisite: advancement to candidacy and an appointed thesis committee. The selection, investigation and written presentation of a project in science education. Concurrent enrollment in 599 (3 units) also is required.

#### 598 Thesis (6)

Prerequisite: advancement to candidacy and an appointed thesis committee. The selection, investigation and written presentation of an experimental problem in science education.

#### 599 Independent Graduate Research (1-2-3)

Graduate student research in a specific area of science education. May be repeated for credit.

For further information and advisement, cottell the gadinic program adviserable coordinates or the interior feducation frograms, can american provedict of the texts, gamma, analysis and or me to memoralerab out most published believes because an

# Science Education Courses

312 Processes of Science (3)

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republished interpreting data (2 hours leaves 2 hours activity)

442 Teaching Science in the Secondary School (3),
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453 Life Science Concepts (3)
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12 Review of Research in Science Education (3)

(This course meets the Gesduste Level Writing Regimment.)

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pented forceeful.

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552 Review of Research in Science Education (3)
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requence to individual research device and execution of appropriate experiment three observational procedures in rest happochesses
concerning problems in science oducation. (3 hours fecutientliscustion formar, inquiry mode)

554 Issues in Science Education (3)
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committee. The selection direction and writing production of a grant production of a growing the scance of a grant Copy of the selection of 199 (1 urns) also in required.

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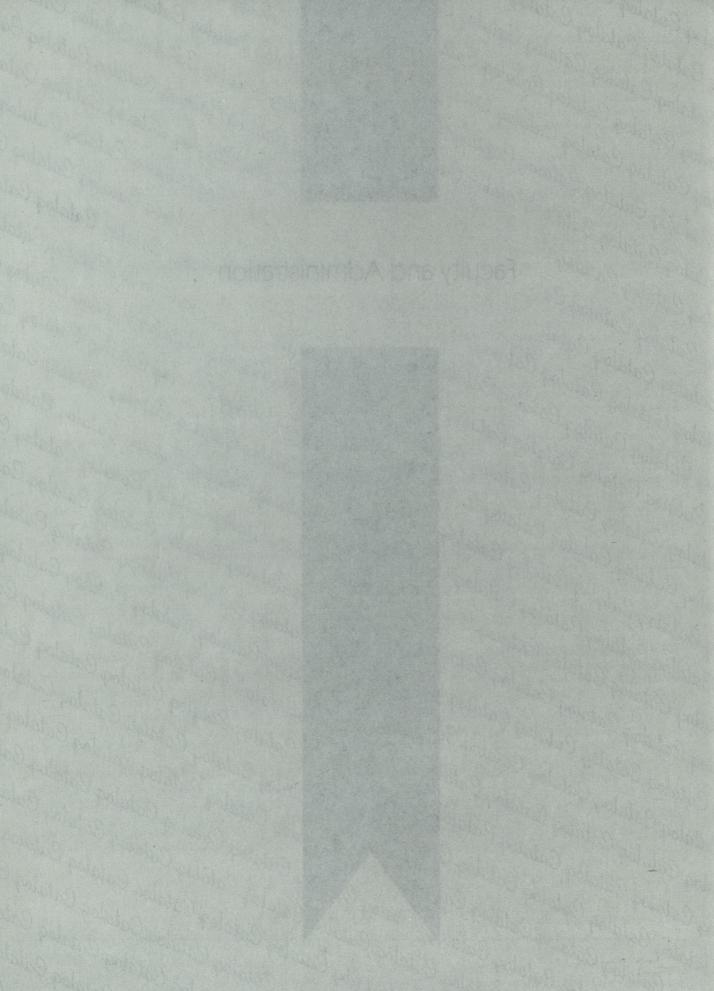
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598 Thesis (6)
Prerequisite: schement to candidary and an appointed thesis committee. The selection, investigation and written presentation of an experimental problem in science education.

A identification work is selected from the departments of Biolagical Science (\$2.21) however end to be included by the first of the property of the first of the selection of

Admission to Graduate Standing: Conditionally Classified
University requirements include a baccalaureate from an accedited institution and a grade-point average of at least 2.5 in the last 60 sentester resits attempted. For this program the baccalaureate must be in true of the sciences (hology, chemistra geologi-

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# Faculty and Administration

1992-93

(Year in parentheses indicates date of appointment as a fulltime member of the faculty or administration.)

### GORDON, MILTON ANDREW (1990), JULI MORATOMA

President; and Professor of Mathematics B.S., Xavier University of Louisiana; M.A., University of Detroit; Ph.D., Illinois Institute of Technology

# ABDELWAHED, FAROUK H. (1973), ABDELWAHED, ABDELWAHED,

Associate Professor of Management; and Acting Chair, Department of Management Science L.L.B., University of Ein Shams; M.P.A., University of Southern California; Ph.D., University of California, Los APKE, THOMAS M. (1974).
Perfector of Management Angeles

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Director, Student Academic Services and University Outreach

B.A., California State University, Long Beach; M.A., Ed.D., University of Southern California B.S., Cornell University M.S., Columbia University of

### ACOSTA DE HESS, JOSEFINA (1988), MARIANTE DE LA COSTA DE HESS, JOSEFINA (1988), MARIANTE DE LA COSTA DE LA COSTA DE LA COSTA DE HESS, JOSEFINA (1988), MARIANTE DE LA COSTA DEL COSTA DE LA COSTA DEL COSTA DE LA COSTA DEL COSTA DEL COSTA DE LA COST

Assistant Professor of Foreign Languages and Literatures B.A., University of Wisconsin; M.A., California State University, Los Angeles; Ph.D., University of Southern California

#### ADAMS, GENE M. (1973),

Professor of Health, Physical Education and Recreation B.S., M.S., University of California, Los Angeles; Ph.D., University of Southern California ARNOLD, JOSEPH H., JR. (197)

# ADLER, LOUISE C. (1988), and and The recently of the second of the secon

Assistant Professor in Educational Administration B.A., California State University, Long Beach; M.A., Ph.D., Claremont Graduate School

ALOIA, STEPHEN D. (1980),

Associate Professor of Special Education B.A., St. Mary's College; M.A., California State University, Chico; Ph.D., University of California, Associate Professor of Marketike B.S., Chinese University of Hong Kong, M.B.

#### ALVA, SYLVIA ALATORRE (1989),

Assistant Professor of Child Development

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#### AMES, MICHAEL D. (1976).

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#### ANDERSEN-FIALA, LINDA R. (1970),

Professor of Foreign Languages and Literatures — French B.A., Kalamazoo College; M.A., Ph.D., University of California, Los Angeles

#### ANDERSON, JUDITH A. (1992),

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#### ANDRIS, RONALD G. (1974),

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Complex and Recreation

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#### APKE, THOMAS M. (1974),

Professor of Management

B.S., Pennsylvania State University; J.D., Marquette University; L.L.M., University of San Diego, School of Law

#### ARCAY, ANN (1992)

Chief Staff Physician

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M.D., University of California, San Francisco

#### ARISTIZABAL, J. DARIO (1987),

Associate Professor of Civil Engineering

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### ARMS, BARBARA (1980),

Professor of Dance

#### ARNOLD, JOSEPH H., JR. (1973),

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B.A., Drury College; M.A., Ph.D., University of Illinois

#### ASO, TAKENORI (1973),

Associate Professor of Sociology

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#### ATWONG, CATHERINE (1991),

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#### AXELRAD, ALLAN M. (1976),

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#### AYANIAN, ROBERT L. (1977).

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#### AYRES, DEBORAH (1991),

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#### BADEN, NANCY T. (1969),

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#### BAGRASH, FRANK M. (1974),

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#### BAILEY, C. IAN (1972),

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#### BAKER, MARTHA J. (1975),

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#### BAKKEN, GORDON M. (1969),

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#### BALDWIN, CECILIA J. (1991),

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#### BARATH, ROBERT M. (1974),

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#### BARNES, CAROL P. (1975),

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### BATHURST, MADELINE K. (1990),

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# BAZAR, ANDY R. (1990),

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#### BEAM, WILLIAM C. (1983),

Associate Professor of Health, Physical Education and Recreation and substantial will asked almost all and the control of the control o

B.A., College of Wooster; M.A., Ph.D., Ohio State University (CALLANDER ) A JAMARA MICH

# BECKMAN, WALTER F. (1971),

Professor of Educational Administration; and Chair of the Department of Educational Administration

B.A., Northern Illinois University; M.A., Northwestern University; Ph.D., Claremont Graduate School

#### BEDELL, JOHN W. (1969),

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#### BEDNAR, CAROL A (1990),

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# BELL, TONY (1968), (8001) 41/A07 4143041314

Professor of Sociology

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# BELLOLI, ROBERT C. (1968),

Coordinator, Undergraduate Studies and Professor of Chemistry and Biochemistry

B.S., St. Louis University; Ph.D., University of California, Berkeley

#### BELLOT, LELAND J. (1964),

Professor of History

B.A., Lamar State College; M.A., Rice Institute; Ph.D., University of Texas

#### BENSON, NANCEE (1980),

Assistant Dean for Student Affairs, School of the Arts and School of Human Development and Community

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#### BERG, DENNIS F. (1970),

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# BICKNER, MEI LIANG (1974),

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#### BIRD, ANNE MARIE (1977),

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#### BIRNBAUM, MICHAEL (1986),

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#### BISHOP, ASHLEY L. (1976),

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#### BITTER, JAMES (1987),

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B.A., Gonzaga University; M.Ed., Ed.D., Idaho State University

# BLACKBURN, JAMES C. (1986),

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#### BLIX, ARLENE J. (1974),

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#### BOALS, DONALD R. (1984),

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### BONCA, CORNEL (1991), CAMED I COMPANIE TO LEER

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#### BOND, JAY W. (1990),

Associate Vice President for Facility Planning and Construction & Manual State of the State of

B.S., California State Polytechnic University, San Luis Obispo; M.B.A., California State University, Fullerton

### 

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# BOSTON, ROSEMARY (1969),

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#### BOTT, VIRGINIA B. (1976),

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# BOYATZIS, CHRIS J. (1991), Herbyland J. Land Vandard A.

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#### BOYUM, KEITH O. (1972),

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#### BRAJER, VICTOR (1987),

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### BRATTSTROM, BAYARD H. (1960),

Professor of Zoology

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# BREESE, LAUREN W. (1965),

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#### BREM, GERALD F. (1976), ARROY ARMARIS AUGAS

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#### BRIL, PATRICIA L. (1971),

Acting Associate Librarian; and Collection Development

B.A., University of California, Irvine; M.S.L.S., University of Southern California; M.P.A., California State University, Fullerton

#### BROADBENT, LEE A. (1975),

Counselor, Career Development and Counseling; Acting Director of Testing

B.A., University of California, Santa Barbara; M.A., Ed.D., University of California, Los Angeles

# BROCK, RICHARD R. (1973),

Professor of Civil Engineering

Professor of Civil Engineering B.S., M.S., University of California, Berkeley; Ph.D., California Institute of Technology

#### BROWER, JONATHAN J. (1972),

Professor of Sociology

B.S., Ph.D., University of California, Santa Barbara; M.A., California State University, Northridge

# BROWN, DANIEL A. (1972),

Professor of Religious Studies

S.T.B., S.T.L., Marianum, Rome; Ph.D., Catholic University The American A learners of the research

# BROWN, MICHAEL E. (1967),

Professor of Political Science B.A., California State University, Long Beach; Ph.D., University of Southern California

### BROWNING, ROBERTA F. (1970),

Director, Career Development and Counseling B.A., Bucknell University; M.S., California State University, Fullerton

# BRUCE, GRADY D. (1981), A JOHAN MANGES

Professor of Marketing

B.B.A., University of Texas; M.B.A., Ph.D., Louisiana State University

#### BRUGALETTA, JOHN J. (1970),

Professor of English and Comparative Literature B.A., M.A. Arizona State University; Ph.D., University of Missouri America Smodablo ... A. B.M., A.M., A.B.

BRUNELLE, GAYLE (1988),
Associate Professor of History

B.A., Saint Michael's College; M.A., Ph.D., Emory University of the state of the

#### BUCK, CHARLES W. (1964),

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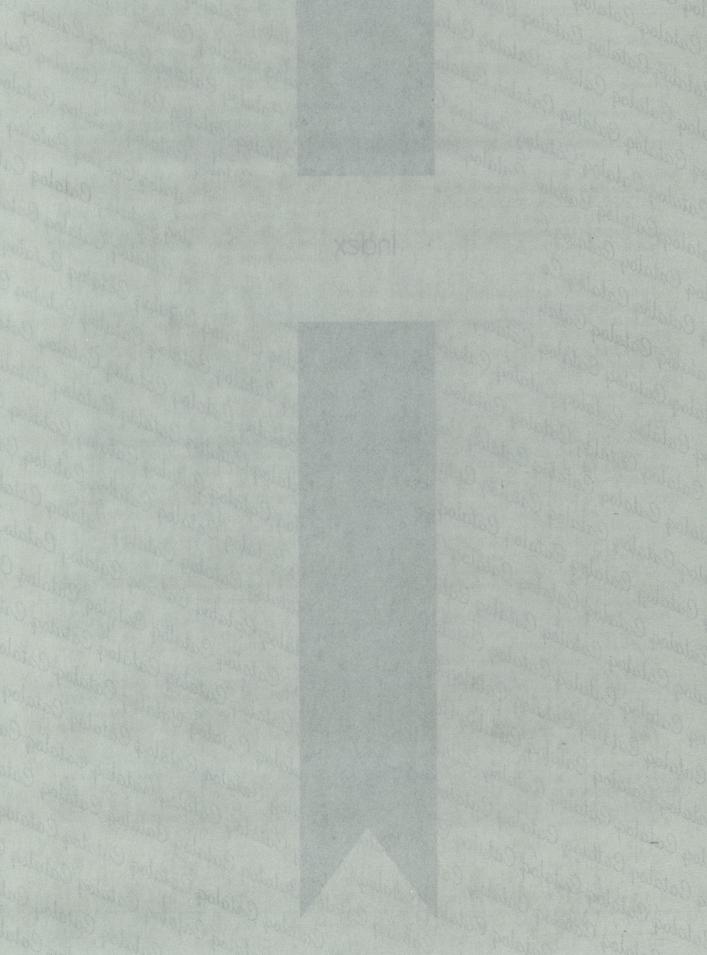
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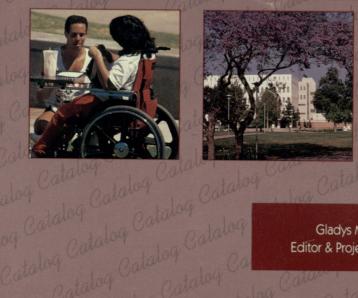
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